

# **Select Board Meeting**

Monday, January 27, 2020 7:00 PM 36 Bartlet Street, Andover, MA 01810 Selectmen's Conference Room



2020 JAN 23 P 4: 19

OWH OF ANDOVER, MASS

I. Call to Order – 7:00 P.M.

# II. Opening Ceremonies

- A. <u>Moment of Silence/Pledge of Allegiance</u>
  Webelos from Andover Cub Scout Pack 79 to lead the Pledge of Allegiance.
- III. Communications/Announcements/Liaison Reports
- IV. Citizens Petitions and Presentations

# V. Public Hearings

A. <u>Small Cell Wireless Installation – 308 Lowell Street – 1st Reading (10 minutes)</u>
Board to review a request by AT&T to install a new small cell facility in Andover to address coverage and capacity issues in the network. The proposed design includes mounting a small antenna measuring 25" tall with a 10" diameter on top of the existing utility pole along with an equipment cabinet, an electrical meter, circuit breaker and associated cables mounted on the side of an existing National Grid utility pole within the public right of way at 308 Lowell Street, Andover, MA, Utility Pole #591-84.

# VI. Regular Business of the Board

A. Gas Disaster After-Action Report – (20 minutes)

Edward Davis and William Taylor of The Edward Davis Company to brief the Board on the After-Action Report for The Town of Andover's Response to the 2018 Merrimack Valley Gas Explosions.

B. <u>Vehicle for Hire License – (5 minutes)</u>

Board to review and consider voting to approve the application of Pascual Colon of Liberty Taxi, Inc., to operate a Vehicle for Hire business at 10 Main Street, Andover, with 5 vehicles to be effective from the date of approval through April 30, 2020.

C. <u>Vehicle for Hire License – (5 minutes)</u>

Board to review and consider voting to approve the application of Lale Wharton of Lale's Livery, Inc. d/b/a VIP Livery, to operate a Vehicle for Hire business at 460 River Road, Apt. 212, Andover, with 1 vehicle to be effective from the date of approval through April 30, 2020.

# D. 2020 Select Board Meetings - (5 minutes)

Board to consider voting to accept the following Select Board meeting schedule:

February 24, 2020

March 9, 2020

March 11, 2020 (Tri-Board)

March 23, 2020

March 25, 2020

March 30, 2020

April 6, 2020

April 21, 2020 (Tuesday)

# VII. Consent Agenda

# A. Appointments by the Town Manager

Board to vote that the following appointments by the Town Manager be approved:

Department	Name	Position	Rate/Term	Date of Hire
Council on Aging	Fran Walker	Member	Term Expires	1/27/2020
Advisory Board			June 30, 2020	
Community	Rebecca Anoli	Substitute	\$19.30/hour	2/03/2020
Development &		Administrative		
Planning		Secretary		
Community	Valarie McDonald	Kid Care	\$12.00/hour	1/28/2020
Services –				
Recreation				
Community	Jesse Gallagher	Seasonal	\$20.00/hour	1/17/2020
Services – Youth				
Services				
Community	Ian Aulbach	Seasonal	\$12.00/hour	1/17/2020
Services – Youth		-		
Services				
Community	Sam Yanowitz	Seasonal	\$12.00/hour	1/17/2020
Services – Youth				
Services				
Community	Hayley Joyall	Seasonal	\$12.00/hour	1/17/2020
Services – Youth				
Services				
Community	Gio Coppola	Seasonal	\$12.00/hour	1/17/2020
Services – Youth				
Services				

# VIII. Approval of Minutes

- A. Board to approve minutes from the following meetings:
  - 1. December 16, 2019

# IX. Executive Session

A. Board to vote to go into Executive Session for confidential communication with Town Counsel and pursuant to option 6 to discuss the purchase, exchange, lease or value of real property and that the Chair declare that an open session may have a

detrimental effect on the negotiating position of the Town, and to approve and release Executive Session Meeting Minutes of December 16, 2019 and January 13, 2020 and not to return to open session.

# X. Adjourn

If any member of the public wishing to attend this meeting seeks special accommodations in accordance with the Americans with Disabilities Act, please contact Kathryn Forina in the Town Manager's Office at 978-623-8215 or by email at <a href="mailto:kathryn.forina@andoverma.us">kathryn.forina@andoverma.us</a>

MEETINGS ARE TELEVISED ON COMCAST CHANNEL 22 AND VERIZON CHANNEL 45

# Town of Andover Policy Applications for Small Cell Wireless Installations

The Town of Andover ("Town") by and through its Board of Selectmen hereby adopts this policy ("Policy") concerning Applications for Small Cell Wireless installations within the public right of way of the Town or located on Town- owned property.

# 1. Application Process.

- a. Applications shall be submitted to the Board of Selectmen through the Office of the Town Manager accompanied by the application fee of \$500 per application, payable to the Town of Andover. The \$500 fee will cover up to 5 locations. Each application for more than 5 installations is subject to a separate fee of \$100 per installation.
- b. Ten (10) hard copies and 1 (one) electronic copy of the application must be submitted. Applications may be hand-delivered during normal Town Hall office hours or mailed. If mailed, the date of receipt shall be the date from which the time standards are measured.
- c. The applicant must also pay for and publish and mail legal notices of the public hearing to local newspapers and abutters, as applicable. The applicant is responsible for obtaining the abutters list for each pole location within the application. The applicant must provide proof of mailing and publication to the Town Manager.
- d. No application will be accepted for review until all items listed in 2, below, have been submitted, as well as all fees and the abutters list paid for.
- e. Upon receipt, the Office of the Town Manager shall date and time stamp the Application as received.
- f. The Town Engineer or his designee shall make a determination as to completeness of the application and notify the Applicant, in writing, within 10 days, if the application is incomplete. If the Applicant is notified that the application is incomplete, the application is deemed rejected and must be resubmitted.
- g. The Office of the Town Manager shall also circulate a copy of the application to the following departments for comment and review: Building; Engineering; Planning; Health; Police; Fire; Conservation Commission; and, any other department the Town Manager, in his or her sole discretion, determines.
- h. Written comments from the departments shall be submitted to the Office of the Town Manager within 20 days of circulation of the application.
- i. Once the application is deemed complete, and all comments have been received, the Board of Selectmen will schedule and hold a public hearing to consider the application, such that a determination may be made on any application for an installation on an existing structure within the time period required by law.

- j. Any material changes to an application, as determined by the Town in its sole discretion, shall constitute a new application for the purposes of the time standards. Where a changed or new application is submitted, the prior application shall be deemed withdrawn.
- k. Upon completion of the hearing, the Board of Selectmen may grant, grant with conditions, or deny the application, based on inadequate capacity of the pole or mounting structure, safety concerns, reliability concerns, or failure to meet applicable engineering or design standards.
- l. Any approval granted to an applicant shall be only for the specific applicant and application. Any change in the name/carrier or sistered service provided by another carrier or small cell wireless location will require a new application and approval from the Town.

# 2. Content of Applications. Applications shall include the following information:

- a. Applicant's name, address, telephone number and email address.
- b. Names, addresses, telephone numbers, and email addresses of anyone acting on behalf of the Applicant with respect to the application.
- c. Detailed drawings, with wet stamp/wet signature, and descriptions of the equipment to be installed, whether mounted on poles or on the ground, or otherwise, including:
  - ii. Type of equipment
  - ii. Specifications of equipment (including but not limited to dimensions and weight of each piece of equipment and of all equipment)
  - iii. Dimension of each piece of equipment and total dimension of all equipment
  - iv. Costs of all equipment and installation
  - v. Equipment mount type and material
  - vi. Power source or sources for equipment, including necessary wires, cables and conduit
  - vii. Expected life of equipment
  - viii. Coverage area of equipment, including:
    - 1. Amount of antennas
    - 2. Antenna model
    - 3. Antenna length
    - 4. Remote radio units (RRU) count and power
    - 5. Antenna height
    - 6. Typical coverage area radius
  - ix. Call capacity of equipment, including:
    - 1. Total RRUs
    - 2. Max bandwidth per RRU
    - 3. Multiple input, multiple output (MIMO) per RRU
    - 4. Backhaul rate per RRU
  - x. Hardening, including:

- 1. If there is battery backup
- 2. If there is generator backup
- 3. If there are multiple fiber paths to switch
- xi. Frequency of equipment proposed to be installed.
- d. Photos, renderings, and elevation of equipment proposed to be installed.
- e. Detailed map with locations of the poles or other structure on which equipment is to be located, including specific pole identification number, if applicable, and the areas it will service. The data must be supplied in a format that can be uploaded as a data layer to the Town's GIS map.
- f. Detailed map showing existing and proposed small cell installations within 500 feet of the Application site.
- g. Certification by a registered professional engineer that the pole/or location will safely support the proposed equipment.
- h. Written consent from the pole, structure, or facility owner to the installation.
- i. Affidavit from a Radio Frequency Engineer outlining the network/network service requirements in Andover and how the installations address that need in Andover. Such affidavit should characterize the current level of coverage and how the desired installations will change the current level of coverage, through or with coverage maps, including current and proposed coverage, including a breakdown of "excellent" "good and "poor" reception areas.
- j. Insurance certificate evidencing workers' compensation coverage, and comprehensive general liability coverage for the installation.
- k. Description as to why the desired location is superior to other similar locations, from a community perspective, including:
  - i. Visual aspects
  - ii. Proximity to residential structures
- l. Description of efforts to co-locate the equipment on existing structures, poles, or towers which currently exist or are under construction. A good faith effort to co-locate is required and evidence of such efforts must be included within the application.
- m. An Affidavit from the applicant which certifies that it will maintain the installations in good repair and according to FCC standards, and will remove any installation not in such good repair, or not in use, within 60 days of being no longer in good repair or no longer in use.
- n. Completed cover sheet on Town form, using extra sheets as necessary to provide all information.

o. Surety bond on which the Town is obligee, in an amount equal to the cost of installation, to ensure removal of equipment.

# 3. Annual Re-Certification and Affidavit.

- a. Each year on July 1 the party responsible for the equipment maintenance shall submit an affidavit which shall list, by location, all small cell wireless installations it maintains within the Town of Andover by location, and shall certify: (1) each such installation that remains in use; (2) that such in use installations remain covered by insurance as required by MassDOT; and (3) each such I installation which is no longer in use.
- b. The party responsible for the equipment maintenance shall pay an annual recertification fee of \$100 per installation which remains in use.
- c. Any small cell wireless installation which is no longer in use shall be removed by the party responsible for its maintenance within 60 days of receipt of the annual recertification affidavit, at that party's expense.
- d. Any small cell wireless installation which is not removed within 60 days after being listed as no longer in use in the annual re-certification affidavit shall be subject to a fine of \$100/day against the party responsible for the equipment's maintenance until such installation is removed.
- e. Where such annual re-certification has not been timely submitted, or equipment no longer in use has not been removed within the required 60-day period, no further applications for small cell wireless installations will be accepted by the Town until such time as the annual re-certification has been submitted and all fees and fines paid.

#### 4. Prohibitions.

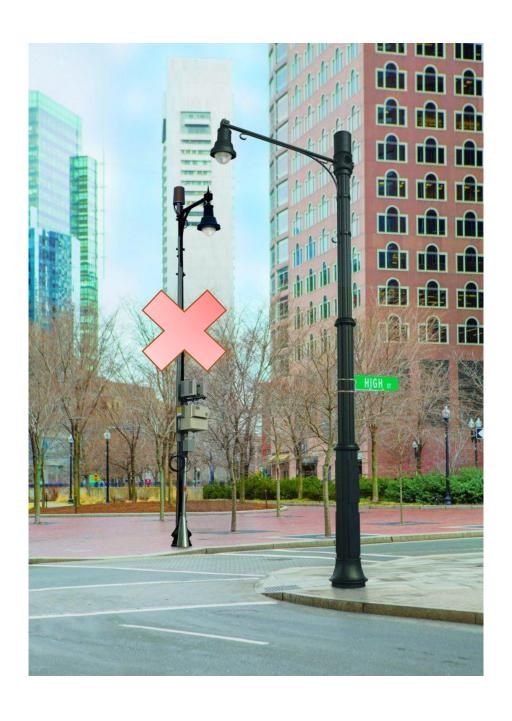
- a. No small cell wireless installations shall be installed on double poles.
- b. No small cell wireless installation shall be installed on poles which are not ADA compliant.
- c. No small cell wireless installations shall remain within the Town right of way or on Town property which has not been certified as in use in the annual recertification affidavit.
- d. No small cell wireless installation equipment shall be replaced or altered without a reapplication, hearing, and approval from the Board of Selectmen unless the equipment is no longer properly functioning, and it is being replaced with the same or substantially similar equipment.
- e. No application may seek approval of more than five (5) proposed facilities.

- f. No applicant or closely held applicant may file more than two (2) applications within 60 days of another.
- g. No emailed applications shall be accepted for filing.
- a. No equipment may be used that is manufactured by a company whose equipment is banned from use by any branch or department of the U.S. government.

# **Town of Andover Small Cell Wireless Facility**

and similar structures

# **Design Rules and Regulations**



These Rules and Regulations describe approved aesthetic and location criteria for Small Cell Wireless Facilities (SWF) in the Town of Andover. These requirements apply to both the SWF and accessory equipment, such as ground-mounted equipment.

#### 1. BACKGROUND

Public spaces and streetscapes enhance the quality of life for our residents and visitors, and ensures that the Town has the foundation to become a more walkable and sustainable city. It also serves as the city's civic, cultural, and physical framework of the character of Andover.

To address the growing demand for wireless technology across the United States, cellular providers propose to increase the capacity of their networks by deploying small cell infrastructure (Small Cell), a new lower-powered antenna technology, to reduce data traffic load on roof mounted equipment and larger cell towers. This new technology requires infrastructure to be installed in closer proximity to the users on the ground. Small Cell infrastructure consists of antennas and related power equipment that transmits wireless signals to improve reliable data streaming. This infrastructure will provide cellular and data coverage to smaller geographic areas. New Small Cell facilities will improve the provider's ability to meet the public's current 4G (LTE) voice and data demands and the future 5th generation cellular needs for interconnected devices to operate at high speeds to access data.

Small Cell infrastructure will affect the function and aesthetics of public spaces. Cities across the nation are beginning to address the issue of balancing the need to accommodate the increased cellular demand with their community's public space character and function. To provide the necessary coverage, each cellular provider will install infrastructure to serve their individual needs; additionally, some companies serve as an infrastructure provider installing equipment that will house infrastructure for multiple cellular providers. Like other utilities, federal law allows Small Cell infrastructure equipment in the public right-of-way. Balancing the need to accommodate increasing cellular demand while preserving public space character and function is critically important, as is the need to design and place the proposed infrastructure in an appropriate way.

# 2. ADOPTION

These Rules and regulations are intended to cover the general standards and aesthetics for the design and installation of Small Cell and similar technology.

# 3. SITING PROHIBITIONS

Small Cell infrastructure is not permitted to be installed on:

- a. No small cell wireless installation shall be installed on Double Poles
- b. No small cell wireless installation shall be installed on poles which are not ADA compliant.
- c. No equipment shall be placed inconsistent with ADA regulations for passage around said infrastructure.

- d. Cabinets or other small cell infrastructure may not be placed within the travel way of the sidewalk to impede ADA accessibility. Sidewalk travel ways shall maintain a minimum of 4 feet in width to accommodate the snow clearing vehicles along the sidewalks.
- e. No small cell wireless installations shall remain within the Town right of way or on Town property which has not been certified as in use in the annual recertification affidavit.
- f. No small cell wireless installation equipment shall be replaced or altered without a reapplication, hearing, and approval from the Board of Selectmen unless the equipment is no longer properly functioning, and it is being replaced with the same or substantially similar equipment.

# 4. AESTHETIC REQUIREMENTS FOR SMALL CELL WIRELESS FACILITIES

- a. Except when Small Cell infrastructure is attached to a wood pole, poles and all equipment must be the same color and finish as surrounding streetlight poles or third party poles.
- b. Exposed wires are not permitted.
  - 1. Corporate or company names (except for location identification purposes noted below), logos, identifying graphics or other advertisements shall not be painted, embossed, applied or displayed in any manner on the poles, equipment enclosures (boxes, cabinets, etc.), hand hole covers, or other component of the pole.
  - 2. Individual location identification information will be permitted, provided no letter, number, or graphic symbol is taller than one inch in height.
- c. Standalone Poles: The height of any standalone pole including its antenna(e) shall not exceed 32 feet or no more than 10 percent taller than other adjacent poles, whichever is greater.
- d. Wood Poles: The height of any replacement wood pole including its antennae shall not exceed 45 feet.

# 5. ANTENNAS

- a. Each small wireless antenna shall be located entirely within a shroud or canister type enclosure.
- b. The diameter of the antenna enclosure at its widest point should not be wider than two times the diameter of the top of the wireless support structure. The enclosure shall not exceed six cubic feet in volume.
- c. All antenna enclosures shall either be mounted to the top of the wireless support structure pole and aligned with the centerline of the wireless support structure, or mounted to the side of the wireless support structure such that the vertical centerline of the antenna enclosure shall be parallel with the wireless support structure with the height of the side mounted antenna being at a location on the wireless support structure noted in the application and approved by the Town, but at least 10 feet above ground level at its lowest point.
- d. Tree "topping" or the improper pruning of trees is prohibited. Any proposed pruning or removal of trees, shrubs or other landscaping already existing in the Right of Way must be noted in the application and must be approved by the Town Tree Warden.

#### 5.1 Cables and Wires

All cables, wires and connectors related to the small wireless facility must be fully concealed on the wireless support structure and shall match the color of the wireless support structure. There shall be no external cables and wires related to the small wireless facility hanging off or otherwise exposed on the wireless support structure.

# 5.2 Colors

All colors shall match the background of any wireless support structure that the facilities are located upon, including equipment cabinets. Notwithstanding the foregoing, in the case of existing wood utility poles, finishes of conduit shall be zinc, aluminum or stainless steel, or colored to match those metal finishes, and equipment cabinets shall be the color of brushed aluminum.

# 5.3 Equipment Enclosures / Concealment

- a. Equipment enclosures, including electric meters, shall be as small as possible, but in no event larger than 28 cubic feet in volume. Ground-mounted equipment shall incorporate concealment elements into the proposed design matching color and materials of the wireless support structure, unless other materials or colors are approved by the Town. Concealment may include, but shall not be limited to, landscaping, strategic placement in less obtrusive locations and placement within existing or replacement street furniture.
- b. Radio equipment shall be fully enclosed within an equipment cabinet or concealed within the antenna shroud enclosure matching the color and materials of the wireless support structure, unless other materials or colors are approved by the Town.
- c. Landscaping concealing equipment enclosures shall be planted in such quantity and size such that 100% screening is achieved within two years of installation.

# 6. SIGNAGE/LOGOS/LIGHTS/DECALS/COOLING FANS

- a. Signage: The small wireless facility permittee shall post its name, location identifying information, and emergency telephone number in an area on the cabinet of the small wireless facility that is visible to the public. Signage required under this section shall not exceed 4 inches by 6 inches, unless otherwise required by law (e.g. radio-frequency (RF) ground notification signs) or the Town. If no cabinet exists, the signage shall be placed at the base of the pole.
- b. Lights: New small wireless facilities and wireless support structures shall not be illuminated, except in accord with state or federal regulations, or unless illumination is integral to the camouflaging strategy such as design intended to look like a street light pole.
- c. Logos/Decals: The small wireless facility operator/permittee shall remove or paint over unnecessary equipment manufacturer decals. The color shall match or shall be as approved by the Building Inspector. Small wireless facilities and wireless support

structures shall not include advertisements and may only display information required by a federal, state, or local agency. The small wireless facility operator/permittee shall utilize the smallest and lowest visibility RF warning sticker required by government or electric utility regulations. Placement of the RF sticker shall be as close to the antenna as possible.

d. Cooling Fans: In residential areas, the small wireless facility operator/permittee shall use a passive cooling system. In the event that a fan is needed, the small wireless facility operator/permittee shall use a cooling fan with a low noise profile.

# 7. LOCATION REQUIREMENTS

# 7.1 Most Preferable Locations

The following are the most preferred areas for new small wireless facilities in the order of preference (1 being most preferable):

- 1. Industrial Districts if not adjacent to a park, residential district or historic district.
- 2. Public Rights of Way areas if not adjacent to a park, residential district.

# 7.2 Collocation Preference

It is the Town's strong preference that whenever an applicant proposes to place a new small wireless facility that the applicant collocate the same on existing wireless support structures.

#### 7.3 Least Preferable Location

The following are the least preferred areas for new small wireless facilities in the order of preference (2 being least preferable).

- 1. Residential Districts
- 2. Parks

#### 7.4 Consideration of Alternate Locations

The Town reserves the right to propose an alternate location for a small wireless facility and/or wireless support structure to the location proposed in the application within one hundred feet of the proposed location or within a distance that is equivalent to the width of the Right of Way or structure in or on which the small wireless facility and/or wireless support structure is proposed, whichever is greater, which the operator shall use if it has the right to use the alternate location on reasonable terms and conditions and the alternate location does not impose technical limits or additional costs.

# 7.5 General limits: Adherence to Other Applicable Standards

If a streetscape is redesigned in the future, including, but not limited to the location and type of streetlights, small cell providers will be required to remove their infrastructure at their own cost

and apply to reinstall small cell infrastructure in accordance with these guidelines and the new streetscape.

# 7.6 Guidelines on Placement

The Town desires to promote cleanly organized and streamlined facilities using the smallest and least intrusive means available to provide wireless services to the community. Generally, a small wireless facility and/or wireless support structure shall match and be consistent with the materials and finish of the wireless support structure, adjacent poles and structures, and of the surrounding area adjacent to their location.

The following additional guidelines on placement shall apply:

- a. Small wireless facilities and wireless support structures shall be located no closer than 150 feet away, radially, from another small wireless facility and wireless support structure.
- b. A combination wireless support structure and streetlight pole should only be located where an existing pole can be removed and replaced, or at a new location where it has been identified that a streetlight is necessary.
- c. Small wireless facilities and wireless support structures shall be located in a manner that does not impede, obstruct, or hinder usual public pedestrian or vehicular travel or public safety on a Right of Way.
- d. Small wireless facilities and wireless support structures shall be located in a manner that does not obstruct the legal use of a Right of Way by a utility provider.
- e. Small wireless facilities and wireless support structures shall be located in a manner that does not violate or conflict with the zoning and general bylaws, applicable law and regulations, or this policy.
- f. Small wireless facilities and wireless support structures shall be located in a manner that does not violate the federal Americans with Disabilities Act.
- g. Small wireless facilities and wireless support structures shall be located in a manner that does not negatively impact the structural integrity of the associated wireless support structure.
- h. Small wireless facilities and wireless support structures shall be located in alignment with existing trees, utility poles, streetlights, and buildings.
- i. Small wireless facilities and wireless support structures shall be located equidistant between trees when possible, with a minimum of 15 feet separation such that no proposed disturbance shall occur within the critical root zone of any tree.
- j. Small wireless facilities and wireless support structures shall be located with appropriate clearance from existing utilities.
- k. Small wireless facilities and wireless support structures shall be located so as not to be located along the frontage of any building deemed to be of historic significance on a federal, state, or local level.
- 1. Small wireless facilities and wireless support structures shall be located not within sight triangles at street intersections.
- m. New wireless support structures shall not be located directly in front of any existing residential, commercial or industrial structure.

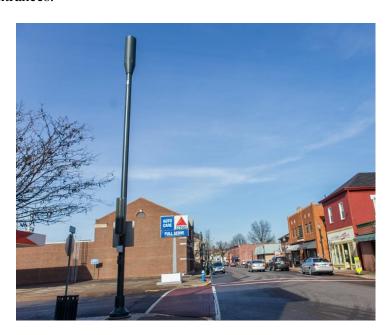
To the greatest extent possible, new wireless support structures shall be located in line with existing lot lines or an equidistance from any two existing structures. In areas of the Town where multiple structures abut each other and/or where no side lot setback requirements exist, new wireless support structures shall not be located directly in front of an entrance or window of any existing structure.



# 8. PEDESTRIAN PATH AND AMENITY ZONE

- a. The sidewalk area of public space is typically delineated into the pedestrian path and the amenity zone. The amenity zone is located between the pedestrian path and the roadway and provides access between the two as well as the area for street trees, streetlights and traffic signals, and other functional elements. It is critical that all pedestrian paths are clear to facilitate safe and optimal access and circulation along sidewalks.
- b. Standalone poles shall not be located in the clear pedestrian path
- c. Standalone poles shall be aligned with existing streetlights, third party poles, and street trees as applicable in order to maintain a visual and physical organization of structures within the right-of-way, as measured from the center of the base of the pole. When streetlight and street tree alignment are offset within the amenity or curbside zones, prioritize alignment of the small cell facility with streetlights.
- d. All measurements shall be taken from the outer edge of the standalone pole and the infrastructure listed in the following specific limits/prohibitions.
- e. Standalone poles must be placed a minimum of six feet (6') from existing fire hydrants or buildings' fire connections.
- f. Standalone poles shall be located a minimum of 10 feet (10') from light poles and traffic signal poles.

- g. Standalone poles shall be located a minimum of 3 feet (3') from bicycle racks and shall not impede the attachment of bicycles.
- h. Standalone poles shall be placed a minimum of ten feet (10') from any above grade building face, including bay windows, show windows and building projections or overhangs.
- i. Poles should be located, to the maximum extent possible, to minimize impact on businesses and residential mixed-use development by avoiding placement directly in front of building entrances, alignment with windows, primary entry walks, or delivery zones or entrances.



# 9. ACCESS, CIRCULATION AND SIGHT DISTANCES

- a. Safe and functional access, circulation, and clear sight lines are important for pedestrian ease of movement and to maintain unobstructed line of sight among drivers, pedestrians, bicyclists.
- b. Standalone poles shall not obstruct ADA access, including maintaining a clear landing at the top of curb ramps at crosswalks.
- c. Pole placement shall not impede, obstruct, violate, conflict with, or hinder any mode of travel over or access to any public street, bridge, tunnel, highway, lane, path, alley, sidewalk, or driveway, including but not limited to the obstruction of sight lines.
- d. Poles shall be placed consistent with the most current Manual on Uniform Traffic Control Devices and adopted District standards for maintenance of an intersection's sight line triangles.
- e. A minimum of fifteen feet (15') shall be maintained between the pole and the outside edge of the alley or driveway.

# 10. OTHER REQUIRED SUBMISSION INFORMATION

- b. A composite map of all the desired locations of the small cell providers to understand the total need for facilities and the areas of highest demand within the study area.
- c. An understanding as to why there is no requirement for multiple providers to share infrastructure (hoteling) and whether this could occur if the number of allowable poles were reduced.

# 11. LIMITATIONS

While the Town fully intends to apply the guidelines established in this policy uniformly to all small wireless facility applications, there may be circumstances where not every specific guideline may be met. In these cases, Town staff will use its reasonable discretion in approving small wireless facilities permit applications that deviate from the strict application of this policy.

# 12. EFFECTIVE DATE OF POLICY

This Policy will be effective as of the 11<sup>th</sup> of April, 2019. Modifications of the Design Rules and Regulations may be modified from time to time by the Andover Board of Selectman.

# Town of Andover Applications for Small Cell Wireless Installations Cover Sheet

Applicant's use of this cover sheet is mandatory. It is meant to provide a framework to ensure compliance with the Town of Andover's Policy for Applications for Small Cell Wireless Installations.

Total number of Small Wireless Facilities being requested on this application  (Per town policy, no application may exceed 5 proposed facilities)
Total number of applications filed by the applicant or closely held applicant in the last 60 days (Per town policy, no application will be accepted if more than 2 applications have been filed in that time period)
☐ Date and Time stamped on each application
\$500 made out to the Town of Andover for up to five locations for initial application review \$100 for each additional location
All applications shall number each page with easily identifiable identifier numbers unique to each application
Specify whether the application is under the FCC Declaratory Ruling and Third Report and Order, §6409/Wireless Siting Order, or neither:
a. If §6409 application, submit documentation to establish the basis for that conclusion
Specify which shot clock (60-90-150 day) applies and the basis for that conclusion:
10 day receipt date
Applications complete, including receipt of all permits or notification that a permit was not needed except for a building permit from other town boards and commissions applicable to the proposed locations and facilities? Yes  No
Checklist of prior reviewing departments (insert Y, N, or N/A)
PoliceFireBoard of HealthConservation CommissionPlanning

Engineering  Building  Other (specify)
a. Submit a copy of all such received permits or verification that no permit is needed
If no, which applications are incomplete (any incomplete applications will be rejected)
a. Identify how each application is incomplete
Date and time of re-submission
Public Hearing Notice published in a newspaper of general circulation and mailed to abutters within 300 feet of the proposed locations by applicant using notice provided by Town. The applicant must obtain the certified abutter's list from the Assessor's Office.
Public Hearing fee is paid for by applicant.
Ten (10) hard copies of the application are required  One (1) electronic copy to <a href="mailto:manager@andoverma.gov">manager@andoverma.gov</a> sent on
Applicant's nameAddress
Telephone numberEmail address
Names, addresses, telephone numbers, and email addresses of anyone acting on behalf of the Applicant with respect to the application.
Ensure that wet stamps/wet signatures of professional designers are on all drawings
Include detailed drawings and descriptions of the equipment to be installed, whether mounted on poles or on the ground, or otherwise, including:
Description of type of equipment

Specifications of equipment Dimension of each piece of equipment and total dimensions of all equipment Costs of all equipment and installation Total weight at each location How will equipment be mounted and what type of material will be used to mount equipment All power sources for equipment (comment on necessary wires, cables, and conduit) Expected life of equipment Coverage area of equipment on the location Amount of antennas Antenna model Antenna length remote radio units (RRU) count and power Antenna height Typical coverage area radius Call capacity of equipment, including: Total RRUs Max bandwidth per RRU Multiple input, multiple output (MIMO) per RRU Backhaul rate per RRU

Hardening, including:

Is there battery backup
Is there generator backup
Will there be multiple fiber paths to switch
Frequency of equipment proposed to be installed.
Photos, rendering and elevation of equipment proposed to be installed:
□ Include detailed map with locations of the poles or other facility on which equipment is to be located, including specific pole identification number, if applicable, and the areas it will service.  Location details must be provided to be compatible as an additional data layer to the Town's GIS map
☐ Include detailed map showing existing and proposed small cell installations within 500 feet of the Application site.
☐ Include certification by a registered professional engineer that the pole/or location will safely support the proposed equipment.
☐ Include written consent from the pole, structure, or facility owner to the installation.
□Include an affidavit from a Radio Frequency Engineer outlining the network/network service requirements in Andover and how the installations address that need in Andover. Such affidavit should characterize the current level of coverage and how the desired installations will change the current level of coverage, through or with coverage maps, including current and proposed coverage, including a breakdown of "excellent" "good and "poor" reception areas.
☐ Include insurance certificate evidencing workers' compensation and comprehensive general liability coverage for the installation.
☐ Include a description as to why the desired location is superior to other similar locations, from a community perspective, including:
□Visual aspects
□Proximity to residential structures

☐ Include a description of efforts to co-locate the equipment on existing structures, poles, or towers which currently exist or are under construction. A good faith effort to co-locate is required and evidence of such efforts must be included within the application.
☐ Include a narrative of how design requirements have been met.
□ Include an affidavit from the applicant which certifies that it will maintain the installations in good repair and according to FCC standards, and will remove any installation not in such good repair, or not in use, within 60 days of being no longer in good repair or no longer in use.
☐ Include surety bond on which the Town is obligee, in an amount equal to the cost of installation, to ensure removal of equipment.

#### Annual Re-Certification and Affidavit.

- Each year on July 1 the party responsible for the equipment maintenance shall submit an affidavit which shall list, by location, all small cell wireless installations it maintains within the Town of Andover by location, and shall certify: (1) each such installation that remains in use; (2) that such in use installations remain covered by insurance as required by MassDOT; and (3) each such installation which is no longer in use.
- The party responsible for the equipment maintenance shall pay an annual re-certification fee of \$100 per installation which remains in use.
- Any small cell wireless installation which is no longer in use shall be removed by the owner within 60 days of receipt of the annual re-certification affidavit, at that party's expense.
- Any small cell wireless installation which is not removed within 60 days after being listed as no longer in use in the annual re-certification affidavit shall be subject to a fine of \$100/day against the party responsible for the equipment's maintenance until such installation is removed.
- Where such annual re-certification has not been timely submitted, or equipment no longer in use has not been removed within the required 60-day period, no further applications for small cell wireless installations will be accepted by the Town until such time as the annual re-certification has been submitted and all fees and fines paid.

☐ Agree to annual re-certification and affidavit and payment as shown above. Conditions/Prohibitions.

- No small cell wireless installations shall be installed on double poles.
- No small cell wireless installation shall be installed on poles which are not ADA compliant.
- No small cell wireless installations shall remain within the Town right of way or on Town property which has not been certified as in use in the annual re-certification affidavit.

similar equipment.
☐ Agree to Conditions/Prohibitions as set forth in town bylaws and policies.
As submitted by,

• No small cell wireless installation equipment shall be replaced or altered without a re-

application, hearing, and approval from the Board of Selectmen unless the equipment is no longer properly functioning, and it is being replaced with the same or substantially

# **brown**rudnick

Edward D. Pare, Jr., Esq. direct dial: 401-276-2639 epare@brownrudnick.com

September 11, 2019

Town of Andover Board of Selectmen c/o Andrew P. Flanagan Office of the Town Manager 36 Bartlet Street Andover, MA 01810

Re: Application for Small Cell Wireless Installation on Existing Utility Pole Near 308 Lowell Street, Andover, Massachusetts

Dear Member of the Board of Selectmen:

We represent New Cingular Wireless PCS, LLC (d/b/a "AT&T") with respect to its deployment of small cell facilities in the Town of Andover and the Commonwealth of Massachusetts. AT&T is licensed by the Federal Communications Commission (the "FCC") to provide wireless communications services in the Town of Andover and throughout the Commonwealth of Massachusetts.

On behalf of AT&T and while reserving all rights, attached please find a completed Small Cell Wireless Installation Application (the "Application") for one (1) small cell facility on an existing utility pole located near 308 Lowell Street, Andover, MA (the "Site") pursuant to the Declaratory Ruling and Third Report and Order 18-133 (the "Order") issued by the FCC in September 2018 <a href="https://docs.fcc.gov/public/attachments/FCC-18-133A1\_Rcd.pdf">https://docs.fcc.gov/public/attachments/FCC-18-133A1\_Rcd.pdf</a> and Massachusetts General Laws Chapter 166, Sections 21, 22 and 25A for telecommunication wires and wireless attachments and appurtenances attached to an existing utility pole owned by National Grid. AT&T has entered into a Pole Attachment Agreement with National Grid and we have provided a copy of the letter of authorization from National Grid to submit this Application. We have also provided a detailed set of drawings (the "Plans") and map for the small cell facility. Additionally, we have provided photographs and photo simulations of the proposed small cell facility. Also enclosed, please find a generic report demonstrating compliance with applicable emissions standards established by the FCC.

While reserving all rights under local, state and federal laws, regulations and orders, and to the extent not preempted by state and federal laws, regulations and orders, AT&T submits the enclosed Application. AT&T proposes this small cell facility in the Town of Andover in order to deal with the rapidly increasing demand on AT&T's wireless network. This small cell facility will work in conjunction with the existing macro sites installed on rooftops, towers and other structures in and around the Town of Andover.

AT&T's radio frequency engineers targeted the proposed location due to the high traffic and data demands on AT&T's network in the area. Please see the enclosed coverage maps submitted as part of the Application. AT&T's existing macro cell sites are not providing adequate data capacity in this location due to population, vehicular and foot traffic, multiple



wireless devices used by customers and other contributing factors. This small cell facility will work to offload the demand on the macro sites and allow for increased data capacity and speed within the immediate vicinity of the Site.

The small cell facility will be installed using standard commercially accepted methods in accordance with all applicable federal, state and local laws, regulations and orders. As depicted on the Plans, the small cell installation on the existing utility pole will include: fiber optic cable(s); remote nodes in a small equipment cabinet 32" in height by 18" wide by 15" deep mounted to the pole at least 11.5' above ground level; an unobtrusive pole top antenna measuring 24.7" long and 10" in diameter; conduits and cable protectors; and, an electrical meter (not on the street side of the pole) with shutoff switch. The Plans also provide the proposed location, pole height, mounting height and equipment specifications.

# The Telecommunications Act of 1996 (the "Act")

Without the installation, AT&T would be unable to provide specifically established coverage and capacity objectives. The utility pole is located within the limited geographic area whereby AT&T's radio frequency engineers determined that a wireless facility is required. The Act imposes substantial restrictions affecting the standard for granting the requested relief. The Act provides that: no laws or actions by any local government or planning or zoning board may prohibit, or have the effect of prohibiting, the placement, construction, or modification of communications towers, antennas, or other wireless facilities in any particular geographic area, see 47 U.S.C. §332(c)(7)(B)(i); local government or planning or zoning boards may not unreasonably discriminate among providers of functionally equivalent services, see 47 U.S.C. §332(c)(7)(B)(i); health concerns may not be considered so long as the emissions comply with the applicable standards of the FCC, see 47 U.S.C. §332(c)(7)(B)(iv); and, decisions must be rendered within a reasonable period of time, see 47 U.S.C. §332(c)(7)(B)(ii) and the Order commonly referenced as the applicable "shot clocks". The FCC shot clock in this instance is 60 days from the submission of the Application.

We respectfully assert that AT&T's proposed small cell facility is reasonable and reasonably complies with the requirements of the Town of Andover in light of the Order and state law. AT&T is willing to work with the Town of Andover with respect the deployment of its small cell facilities and we look forward to your feedback.

If you have any questions, please don't hesitate to contact me. We look forward to presenting this Application at an upcoming meeting.

Sincerely,

**BROWN RUDNICK LLP** 

Edward D. Pare, Jr., Esq.

# APPLICATION FOR SMALL CELL WIRELESS INSTALLATION

Content of Applications. Applications shall include the following information:

a. Applicant's name, address, telephone number and email address.

New Cingular Wireless PCS, LLC (d/b/a "AT&T") 550 Cochituate Road, Suites 13 & 14 Framingham, MA 01701 RD1090@att.com (Rich Detch)

b. Names, addresses, telephone numbers, and email addresses of anyone acting on behalf of the Applicant with respect to the application.

Ed Donnelly; Area Manager, External Affairs, State Legislative & Regulatory Affairs, AT&T Services Inc., 160 Federal Street, 17th Floor, Boston, MA 02110; 617-283-0210; ed441y@att.com.

Jeff Iacoviello; Site Acquisition for AT&T; Centerline Communications, 750 W Center St, Floor 3, West Bridgewater, MA 02379774.261.0043; jiacoviello@centerlinecommunciations.com.

Kevin Breuer, Radio Frequency Engineer for AT&T; 550 Cochituate Road, Suites 13 & 14, Framingham, MA 01701; KN2322@att.com.

Edward D. Pare, Jr., Outside Counsel; Brown Rudnick, LLP, 10 Memorial Blvd., Providence, RI 02903; 401.276.2639; epare@brownrudnick.com.

- c. Detailed drawings, with wet stamp/wet signature, and descriptions of the equipment to be installed, whether mounted on poles or on the ground, or otherwise, including:
  - ii. Type of equipment

#### See enclosed Plans.

ii. Specifications of equipment (including but not limited to dimensions and weight of each piece of equipment and of all equipment)

# See enclosed Plans.

iii. Dimension of each piece of equipment and total dimension of all equipment

#### See enclosed Plans.

iv. Costs of all equipment and installation

The costs are estimated to be \$25,000.

v. Equipment mount type and material

See enclosed Plans.

vi. Power source or sources for equipment, including necessary wires, cables and conduit.

See enclosed Plans - power and fiber to be determined by utility providers.

vii. Expected life of equipment

The expected life of the proposed equipment is estimated to be approximately 15-20 years.

viii. Coverage area of equipment, including:

1. Amount of antennas

One

2. Antenna model

**Galtronics Model #6480/6621 GQ2410-06621 (or equal)** 

3. Antenna length **24.7**"

4. Remote radio units (RRU) count and power Three (3) RRUs, standard electrical power

5. Antenna height

Top height of antenna 31'9" above ground level; the existing utility pole is 28'9" above ground level.

6. Typical coverage area radius

Varies depending on terrain, obstructions and usage.

Also see the enclosed Plans, RF Report and Coverage Maps. The RRUs use standard electrical power provided by National Grid.

- ix. Call capacity of equipment, including:
  - 1. Total RRUs

One (1) 2205 RRU and two (2) paired 2203 RRUs for a total of three (3) RRUs  $\,$ 

2. Max bandwidth per RRU

The 2205 RRU is capable of three (3) 20 Mhz channels with a theoretical throughput of 600 megabits per second (Mbps). The two (2) paired 2203 RRUs are capable of one (1) 20 Mhz channel with theoretical throughput of 390 Mbps.

Town of Andover September 11, 2019 Page 5

- 3. Multiple input, multiple output (MIMO) per RRU
  The 2205 RRU is 2x2 MIMO and the two (2) paired 2203 RRUs
  are 4x4 MIMO.
- 4. Backhaul rate per RRU **10 gigabits per second**

As noted on the Plans, AT&T's RRUs are within the proposed equipment cabinet and will not be visible.

- x. Hardening, including:
  - 1. If there is battery backup

There is no battery backup proposed.

- 2. If there is generator backup
  - There is no generator backup proposed.
- 3. If there are multiple fiber paths to switch AT&T will likely maintain more than one fiber paths to its switch.
- xi. Frequency of equipment proposed to be installed.

  As noted in the enclosed RF Report. AT&T utilizes 700, 850, 1900, 2100 and 2300 MHz frequencies.
- d. Photos, renderings, and elevation of equipment proposed to be installed.

# See enclosed photos and photo simulations and the elevation on the Plans.

e. Detailed map with locations of the poles or other structure on which equipment is to be located, including specific pole identification number, if applicable, and the areas it will service. The data must be supplied in a format that can be uploaded as a data layer to the Town's GIS map.

# See enclosed Plans and map.

f. Detailed map showing existing and proposed small cell installations within 500 feet of the Application site.

There are no existing small cell installations within 500 feet of the Site. AT&T is not aware of any proposed small cell installation within 500 feet of the Site.

g. Certification by a registered professional engineer that the pole/or location will safely support the proposed equipment.

# See enclosed structural report.

h. Written consent from the pole, structure, or facility owner to the installation.

Please see the enclosed letter of authorization from National Grid to seek approval for the small cell facility at the Site. AT&T has entered into a pole attachment agreement with National Grid.

i. Affidavit from a Radio Frequency Engineer outlining the network/network service requirements in Andover and how the installations address that need in Andover. Such affidavit should characterize the current level of coverage and how the desired installations will change the current level of coverage, through or with coverage maps, including current and proposed coverage, including a breakdown of "excellent" "good and "poor" reception areas.

# Please see the enclosed RF Report and Coverage Maps from AT&T's radio frequency engineer.

j. Insurance certificate evidencing workers' compensation coverage, and comprehensive general liability coverage for the installation.

#### Please see the enclosed certificate of insurance.

- k. Description as to why the desired location is superior to other similar locations, from a community perspective, including:
  - i. Visual aspects
  - ii. Proximity to residential structures

The Site is located in the public right-of-way along Route 133 in an area containing commercial uses. The proposed small cell facility will be located on an existing utility pole. The antenna is unobtrusive and is only 24.7" in height. The equipment cabinet is 32" long by 18" wide by 15" deep and will be attached to the pole at least 11'6" from the ground. The closest structure is at 323 Lowell Street and contains a medical facility. The Site is within the public right-of-way but is near the Limited Service and Single Residence C zoning districts and appears to be within the Single Residence C zoning district.

l. Description of efforts to co-locate the equipment on existing structures, poles, or towers which currently exist or are under construction. A good faith effort to co-locate is required and evidence of such efforts must be included within the application.

# AT&T proposes to attach to an existing utility pole.

m. An Affidavit from the applicant which certifies that it will maintain the installations in good repair and according to FCC standards, and will remove any installation not in such

good repair, or not in use, within 60 days of being no longer in good repair or no longer in use.

# See the enclosed "Letter of Authorization" from AT&T certifying same.

n. Completed cover sheet on Town form, using extra sheets as necessary to provide all information.

# See the enclosed completed Cover Sheet.

o. Surety bond on which the Town is obligee, in an amount equal to the cost of installation, to ensure removal of equipment.

# See enclosed removal bond in the amount of \$25,000.

#### 3. Annual Re-Certification and Affidavit.

- a. Each year on July 1 the party responsible for the equipment maintenance shall submit an affidavit which shall list, by location, all small cell wireless installations it maintains within the Town of Andover by location, and shall certify: (1) each such installation that remains in use; (2) that such in use installations remain covered by insurance as required by MassDOT; and (3) each such I installation which is no longer in use.
- b. The party responsible for the equipment maintenance shall pay an annual recertification fee of \$100 per installation which remains in use.
- c. Any small cell wireless installation which is no longer in use shall be removed by the party responsible for its maintenance within 60 days of receipt of the annual recertification affidavit, at that party's expense.
- d. Any small cell wireless installation which is not removed within 60 days after being listed as no longer in use in the annual re-certification affidavit shall be subject to a fine of \$100/day against the party responsible for the equipment's maintenance until such installation is removed.
- e. Where such annual re-certification has not been timely submitted, or equipment no longer in use has not been removed within the required 60-day period, no further applications for small cell wireless installations will be accepted by the Town until such time as the annual re-certification has been submitted and all fees and fines paid.

To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions. It is not clear why there is a reference to "MassDOT" above in 3(a).

# 4. Prohibitions.

- a. No small cell wireless installations shall be installed on double poles.
- b. No small cell wireless installation shall be installed on poles which are not ADA compliant.
- c. No small cell wireless installations shall remain within the Town right of way or on Town property which has not been certified as in use in the annual recertification affidavit.
- d. No small cell wireless installation equipment shall be replaced or altered without a reapplication, hearing, and approval from the Board of Selectmen unless the equipment is no longer properly functioning, and it is being replaced with the same or substantially similar equipment.
- e. No application may seek approval of more than five (5) proposed facilities.
- f. No applicant or closely held applicant may file more than two (2) applications within 60 days of another.
- g. No emailed applications shall be accepted for filing.

To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions.

a. No equipment may be used that is manufactured by a company whose equipment is banned from use by any branch or department of the U.S. government.

To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with this provision.

# **Town of Andover Small Cell Wireless Facility**

# and similar structures

# Design Rules and Regulations AT&T's Responses

# 1. ADOPTION

These Rules and regulations are intended to cover the general standards and aesthetics for the design and installation of Small Cell and similar technology.

To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions.

# 2. SITING PROHIBITIONS

Small Cell infrastructure is not permitted to be installed on:

- a. No small cell wireless installation shall be installed on Double Poles
- b. No small cell wireless installation shall be installed on poles which are not ADA compliant.
- c. No equipment shall be placed inconsistent with ADA regulations for passage around said infrastructure.
- d. Cabinets or other small cell infrastructure may not be placed within the travel way of the sidewalk to impede ADA accessibility. Sidewalk travel ways shall maintain a minimum of 4 feet in width to accommodate the snow clearing vehicles along the sidewalks.
- e. No small cell wireless installations shall remain within the Town right of way or on Town property which has not been certified as in use in the annual recertification affidavit.
- f. No small cell wireless installation equipment shall be replaced or altered without a reapplication, hearing, and approval from the Board of Selectmen unless the equipment is no longer properly functioning, and it is being replaced with the same or substantially similar equipment.

To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions.

# 3. AESTHETIC REQUIREMENTS FOR SMALL CELL WIRELESS FACILITIES

- a. Except when Small Cell infrastructure is attached to a wood pole, poles and all equipment must be the same color and finish as surrounding streetlight poles or third party poles.
- b. Exposed wires are not permitted.
  - 1. Corporate or company names (except for location identification purposes noted below), logos, identifying graphics or other advertisements shall not be painted, embossed, applied or displayed in any manner on the poles, equipment enclosures (boxes, cabinets, etc.), hand hole covers, or other component of the pole.
  - 2. Individual location identification information will be permitted, provided no letter, number, or graphic symbol is taller than one inch in height.
- c. Standalone Poles: The height of any standalone pole including its antenna(e) shall not exceed 32 feet or no more than 10 percent taller than other adjacent poles, whichever is greater.
- d. Wood Poles: The height of any replacement wood pole including its antennae shall not exceed 45 feet.

AT&T proposes to use an existing wood utility pole in the public right-of-way which is 28'9". To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions.

#### 4. ANTENNAS

- a. Each small wireless antenna shall be located entirely within a shroud or canister type enclosure.
- b. The diameter of the antenna enclosure at its widest point should not be wider than two times the diameter of the top of the wireless support structure. The enclosure shall not exceed six cubic feet in volume.
- c. All antenna enclosures shall either be mounted to the top of the wireless support structure pole and aligned with the centerline of the wireless support structure, or mounted to the side of the wireless support structure such that the vertical centerline of the antenna enclosure shall be parallel with the wireless support structure with the height of the side mounted antenna being at a location on the wireless support structure noted in the application and approved by the Town, but at least 10 feet above ground level at its lowest point.
- d. Tree "topping" or the improper pruning of trees is prohibited. Any proposed pruning or removal of trees, shrubs or other landscaping already existing in the Right of Way must be noted in the application and must be approved by the Town Tree Warden.

AT&T's proposed antenna will be attached to an existing wood utility pole in the public right-of-way and is 10" diameter and is 1.22 cubic feet in volume. To the extent

Town of Andover September 11, 2019 Page 11

not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions.

#### 5.1 Cables and Wires

All cables, wires and connectors related to the small wireless facility must be fully concealed on the wireless support structure and shall match the color of the wireless support structure. There shall be no external cables and wires related to the small wireless facility hanging off or otherwise exposed on the wireless support structure.

To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions to the maximum extent possible.

#### 5.2 Colors

All colors shall match the background of any wireless support structure that the facilities are located upon, including equipment cabinets. Notwithstanding the foregoing, in the case of existing wood utility poles, finishes of conduit shall be zinc, aluminum or stainless steel, or colored to match those metal finishes, and equipment cabinets shall be the color of brushed aluminum.

To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions to the maximum extent possible.

# 5.3 Equipment Enclosures / Concealment

- a. Equipment enclosures, including electric meters, shall be as small as possible, but in no event larger than 28 cubic feet in volume. Ground-mounted equipment shall incorporate concealment elements into the proposed design matching color and materials of the wireless support structure, unless other materials or colors are approved by the Town. Concealment may include, but shall not be limited to, landscaping, strategic placement in less obtrusive locations and placement within existing or replacement street furniture.
- b. Radio equipment shall be fully enclosed within an equipment cabinet or concealed within the antenna shroud enclosure matching the color and materials of the wireless support structure, unless other materials or colors are approved by the Town.
- c. Landscaping concealing equipment enclosures shall be planted in such quantity and size such that 100% screening is achieved within two years of installation.

AT&T's proposed equipment cabinet is 3.86 cubic feet in volume an AT&T will work with the Town of Andover to provide the best color to match the wood utility pole and surroundings. To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions.

#### 5. SIGNAGE/LOGOS/LIGHTS/DECALS/COOLING FANS

- a. Signage: The small wireless facility permittee shall post its name, location identifying information, and emergency telephone number in an area on the cabinet of the small wireless facility that is visible to the public. Signage required under this section shall not exceed 4 inches by 6 inches, unless otherwise required by law (e.g. radio-frequency (RF) ground notification signs) or the Town. If no cabinet exists, the signage shall be placed at the base of the pole.
- b. Lights: New small wireless facilities and wireless support structures shall not be illuminated, except in accord with state or federal regulations, or unless illumination is integral to the camouflaging strategy such as design intended to look like a street light pole.
- c. Logos/Decals: The small wireless facility operator/permittee shall remove or paint over unnecessary equipment manufacturer decals. The color shall match or shall be as approved by the Building Inspector. Small wireless facilities and wireless support structures shall not include advertisements and may only display information required by a federal, state, or local agency. The small wireless facility operator/permittee shall utilize the smallest and lowest visibility RF warning sticker required by government or electric utility regulations. Placement of the RF sticker shall be as close to the antenna as possible.
- d. Cooling Fans: In residential areas, the small wireless facility operator/permittee shall use a passive cooling system. In the event that a fan is needed, the small wireless facility operator/permittee shall use a cooling fan with a low noise profile.

Please see the enclosed Plans with respect signage. To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions.

# 7. LOCATION REQUIREMENTS

#### 7.1 Most Preferable Locations

The following are the most preferred areas for new small wireless facilities in the order of preference (1 being most preferable):

- 1. Industrial Districts if not adjacent to a park, residential district or historic district.
- 2. Public Rights of Way areas if not adjacent to a park, residential district.

Town of Andover September 11, 2019 Page 13

AT&T notes that the Site is located in the public right-of way along Route 133. The Site is located in an area containing commercial uses and is just off of the Interstate Route 93 exit ramp. Under Massachusetts law, while public rights-of-way are not within designated zoning districts, accordingly to the Andover Zoning Map, this Site may be designated as being within the Single Residence C or the Limited Service zoning district.

#### 7.2 Collocation Preference

It is the Town's strong preference that whenever an applicant proposes to place a new small wireless facility that the applicant collocate the same on existing wireless support structures.

# AT&T is proposing to collocate on an existing wood utility pole.

# 7.3 Least Preferable Location

The following are the least preferred areas for new small wireless facilities in the order of preference (2 being least preferable).

- 1. Residential Districts
- 2. Parks

# See response to Section 7.1.

#### 7.4 Consideration of Alternate Locations

The Town reserves the right to propose an alternate location for a small wireless facility and/or wireless support structure to the location proposed in the application within one hundred feet of the proposed location or within a distance that is equivalent to the width of the Right of Way or structure in or on which the small wireless facility and/or wireless support structure is proposed, whichever is greater, which the operator shall use if it has the right to use the alternate location on reasonable terms and conditions and the alternate location does not impose technical limits or additional costs.

AT&T's propose facility fully complies with these Rules and Regulations. AT&T is willing to work cooperatively with the Town of Andover but notes that any alternative location would impose additional cost on AT&T.

# 7.5 General limits: Adherence to Other Applicable Standards

If a streetscape is redesigned in the future, including, but not limited to the location and type of streetlights, small cell providers will be required to remove their infrastructure at their own cost and apply to reinstall small cell infrastructure in accordance with these guidelines and the new streetscape.

#### This provision is not applicable to this Application.

#### 7.6 Guidelines on Placement

The Town desires to promote cleanly organized and streamlined facilities using the smallest and least intrusive means available to provide wireless services to the community. Generally, a small wireless facility and/or wireless support structure shall match and be consistent with the materials and finish of the wireless support structure, adjacent poles and structures, and of the surrounding area adjacent to their location.

The following additional guidelines on placement shall apply:

- a. Small wireless facilities and wireless support structures shall be located no closer than 150 feet away, radially, from another small wireless facility and wireless support structure.
- b. A combination wireless support structure and streetlight pole should only be located where an existing pole can be removed and replaced, or at a new location where it has been identified that a streetlight is necessary.
- c. Small wireless facilities and wireless support structures shall be located in a manner that does not impede, obstruct, or hinder usual public pedestrian or vehicular travel or public safety on a Right of Way.
- d. Small wireless facilities and wireless support structures shall be located in a manner that does not obstruct the legal use of a Right of Way by a utility provider.
- e. Small wireless facilities and wireless support structures shall be located in a manner that does not violate or conflict with the zoning and general bylaws, applicable law and regulations, or this policy.
- f. Small wireless facilities and wireless support structures shall be located in a manner that does not violate the federal Americans with Disabilities Act.
- g. Small wireless facilities and wireless support structures shall be located in a manner that does not negatively impact the structural integrity of the associated wireless support structure.
- h. Small wireless facilities and wireless support structures shall be located in alignment with existing trees, utility poles, streetlights, and buildings.
- i. Small wireless facilities and wireless support structures shall be located equidistant between trees when possible, with a minimum of 15 feet separation such that no proposed disturbance shall occur within the critical root zone of any tree.
- j. Small wireless facilities and wireless support structures shall be located with appropriate clearance from existing utilities.
- k. Small wireless facilities and wireless support structures shall be located so as not to be located along the frontage of any building deemed to be of historic significance on a federal, state, or local level.

- 1. Small wireless facilities and wireless support structures shall be located not within sight triangles at street intersections.
- m. New wireless support structures shall not be located directly in front of any existing residential, commercial or industrial structure.

To the greatest extent possible, new wireless support structures shall be located in line with existing lot lines or an equidistance from any two existing structures. In areas of the Town where multiple structures abut each other and/or where no side lot setback requirements exist, new wireless support structures shall not be located directly in front of an entrance or window of any existing structure.

To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions.

#### 8. PEDESTRIAN PATH AND AMENITY ZONE

- a. The sidewalk area of public space is typically delineated into the pedestrian path and the amenity zone. The amenity zone is located between the pedestrian path and the roadway and provides access between the two as well as the area for street trees, streetlights and traffic signals, and other functional elements. It is critical that all pedestrian paths are clear to facilitate safe and optimal access and circulation along sidewalks.
- b. Standalone poles shall not be located in the clear pedestrian path
- c. Standalone poles shall be aligned with existing streetlights, third party poles, and street trees as applicable in order to maintain a visual and physical organization of structures within the right-of-way, as measured from the center of the base of the pole. When streetlight and street tree alignment are offset within the amenity or curbside zones, prioritize alignment of the small cell facility with streetlights.
- d. All measurements shall be taken from the outer edge of the standalone pole and the infrastructure listed in the following specific limits/prohibitions.
- e. Standalone poles must be placed a minimum of six feet (6') from existing fire hydrants or buildings' fire connections.
- f. Standalone poles shall be located a minimum of 10 feet (10') from light poles and traffic signal poles.
- g. Standalone poles shall be located a minimum of 3 feet (3') from bicycle racks and shall not impede the attachment of bicycles.
- h. Standalone poles shall be placed a minimum of ten feet (10') from any above grade building face, including bay windows, show windows and building projections or overhangs.
- i. Poles should be located, to the maximum extent possible, to minimize impact on businesses and residential mixed-use development by avoiding placement directly in front of building entrances, alignment with windows, primary entry walks, or delivery zones or entrances.

To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions.

#### 9. ACCESS, CIRCULATION AND SIGHT DISTANCES

- a. Safe and functional access, circulation, and clear sight lines are important for pedestrian ease of movement and to maintain unobstructed line of sight among drivers, pedestrians, bicyclists.
- b. Standalone poles shall not obstruct ADA access, including maintaining a clear landing at the top of curb ramps at crosswalks.
- c. Pole placement shall not impede, obstruct, violate, conflict with, or hinder any mode of travel over or access to any public street, bridge, tunnel, highway, lane, path, alley, sidewalk, or driveway, including but not limited to the obstruction of sight lines.
- d. Poles shall be placed consistent with the most current Manual on Uniform Traffic Control Devices and adopted District standards for maintenance of an intersection's sight line triangles.
- e. A minimum of fifteen feet (15') shall be maintained between the pole and the outside edge of the alley or driveway.

To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions.

#### 10. OTHER REQUIRED SUBMISSION INFORMATION

- b. A composite map of all the desired locations of the small cell providers to understand the total need for facilities and the areas of highest demand within the study area.
  - AT&T seeks approval for one (1) small cell facility at this time. As network design and budgets permit, AT&T may seek additional locations for small cell facilities. Please see AT&T's network coverage maps for levels of existing coverage regarding potential additional needs for small cell facilities.
- c. An understanding as to why there is no requirement for multiple providers to share infrastructure (hoteling) and whether this could occur if the number of allowable poles were reduced.
  - AT&T cannot share its infrastructure with competitors and under federal and state law, is permitted to provide service and install infrastructure in the Town of Andover. We understand National Grid will only allow one (1) small cell facility on any one (1) utility pole.

Town of Andover September 11, 2019 Page 17

#### 11. LIMITATIONS

While the Town fully intends to apply the guidelines established in this policy uniformly to all small wireless facility applications, there may be circumstances where not every specific guideline may be met. In these cases, Town staff will use its reasonable discretion in approving small wireless facilities permit applications that deviate from the strict application of this policy.

AT&T is willing to work cooperatively with the Town of Andover

#### 12. EFFECTIVE DATE OF POLICY

This Policy will be effective as of the 11<sup>th</sup> of April, 2019. Modifications of the Design Rules and Regulations may be modified from time to time by the Andover Board of Selectman.

No response to this provision is required.

63478543 v2-WorkSiteUS-024519/1096

### Town of Andover Applications for Small Cell Wireless Installations Cover Sheet

Applicant's use of this cover sheet is mandatory. It is meant to provide a framework to ensure compliance with the Town of Andover's Policy for Applications for Small Cell Wireless Installations.

Total number of Small Wireless Facilities being requested on this application  one (1) (Per town policy, no application may exceed 5 proposed facilities)
Total number of applications filed by the applicant or closely held applicant in the last 60 days (Per town policy, no application will be accepted if more than 2 applications have been filed in that time period)  Zero (0)
☐ Date and Time stamped on each application
\$500 made out to the Town of Andover for up to five locations for initial application review \$100 for each additional location
All applications shall number each page with easily identifiable identifier numbers unique to each application
Specify whether the application is under the FCC Declaratory Ruling and Third Report and
Order, §6409/Wireless Siting Order, or neither: <u>FCC Declaratory Ruling and Third Report and Order 18-133</u> Massachusetts General Laws Chapter 166 Sections 21, 22 and 25/
a. If §6409 application, submit documentation to establish the basis for that conclusion
Specify which shot clock (60-90-150 day) applies and the basis for that conclusion:  60 Days
10 day receipt date
Applications complete, including receipt of all permits or notification that a permit was not needed except for a building permit from other town boards and commissions applicable to the proposed locations and facilities? Yes No
Checklist of prior reviewing departments (insert Y, N, or N/A)
Police
Fire
Board of Health
Conservation Commission
Planning

Engineering Building Other (specify)
a. Submit a copy of all such received permits or verification that no permit is needed
If no, which applications are incomplete (any incomplete applications will be rejected)
a. Identify how each application is incomplete
Date and time of re-submission
Public Hearing Notice published in a newspaper of general circulation and mailed to abutters within 300 feet of the proposed locations by applicant using notice provided by Town. The applicant must obtain the certified abutter's list from the Assessor's Office.
Public Hearing fee is paid for by applicant.
Ten (10) hard copies of the application are required One (1) electronic copy to <a href="mailto:manager@andoverma.gov">manager@andoverma.gov</a> sent on
Applicant's nameNew Cingular Wireless PCS, LLC (d/b/a "AT&T")
Address 550 Cochituate Road, Suites 13 & 14, Framingham, MA 01701
Telephone number 508-596-9245 Email address. Rd1090@att.com (Richard Detch)
Names, addresses, telephone numbers, and email addresses of anyone acting on behalf of the Applicant with respect to the application.
For application process please contact: Jeff lacoviello, 774-261-0043, jiacoviello@centerlinecommunications.com
Ed Donnelly, External Affairs, AT&T Services Inc., 160 Federal Street, 17th floor, Boston MA, 02110, 617-283-0210
Edward D. Pare, Jr., Brown Rudnick LLP, One Financial Center, Boston, MA 02111, epare@brownrudnick.com  Kevin Breuer, RF Engineer, AT&T Mobility; 550 Cochituate Road, Suites 13 & 14, Framingham, MA 01701; KB2322@att.com
Nevin breder, Nr. Engineer, AT&T Mobility, 550 Cochitate Noad, Suites 15 & 14, 1 familigram, MA 01701, N. D2522 & att. com
Ensure that wet stamps/wet signatures of professional designers are on all drawings
Include detailed drawings and descriptions of the equipment to be installed, whether mounted on
poles or on the ground, or otherwise, including: See enclosed Plans.
Description of type of equipment See enclosed Plans.

Specifications of equipment See enclosed Plans.

Dimension of each piece of equipment and total dimensions of all equipment See enclosed Plans.

Costs of all equipment and installation \$25,000

Total weight at each location

How will equipment be mounted and what type of material will be used to mount equipment **See enclosed Plans.** 

All power sources for equipment (comment on necessary wires, cables, and conduit)

See enclosed Plans - power and fiber to be determined by utility providers.

Expected life of equipment

The expected life of the proposed equipment is estimated to be approximately 15-20 years.

Coverage area of equipment on the location

Amount of antennas

One

Antenna model

Galtronics Model #6480/6621 GQ2410-06621 (or equal)

Antenna length remote radio units (RRU) count and power

24.7" (Antenna length). Three (3) RRUs, standard electrical power

Antenna height

Top height of antenna 31'9" above ground level; the existing utility pole is 28'9" above ground level.

Typical coverage area radius

Varies depending on terrain, obstructions and usage.

Call capacity of equipment, including:

Total RRUsOne (1) 2205 RRU and two (2) paired 2203 RRUs for a total of three (3) RRUs

Max bandwidth per RRU The 2205 RRU is capable of three (3) 20 Mhz channels with a theoretical throughput of 600 megabits per second (Mbps). The two (2) paired 2203 RRUs are capable of one (1) 20 Mhz channel with theoretical throughput of 390 Mbps.

Multiple input, multiple output (MIMO) per RRU

The 2205 RRU is 2x2 MIMO and the two (2) paired 2203 RRUs are 4x4 MIMO.

Backhaul rate per RRU 10 gigabits per second

As noted on the Plans, AT&T's RRUs are within the proposed equipment cabinet and will not be visible.

Hardening, including:

Is there battery backup

a community perspective, including:

□Visual aspects

There is no battery backup proposed.

Is there generator backup

There is no generator backup proposed.

Will there be multiple fiber paths to switch

AT&T will likely maintain more than one fiber paths to its switch.

Frequency of equipment proposed to be installed.

As noted in the enclosed RF Report. AT&T utilizes 700, 850, 1900, 2100 and 2300 MHz frequencies.  Photos, rendering and elevation of equipment proposed to be installed:  See enclosed photos and photo simulations and the elevation on the Plans.  Include detailed map with locations of the poles or other facility on which equipment is to be	
located, including specific pole identification number, if applicable, and the areas it will service.  Location details must be provided to be compatible as an additional data layer to the	
See enclosed Plans and map.	
☐ Include detailed map showing existing and proposed small cell installations within 500 feet of	
the Application site. There are no existing small cell installations within 500 feet of the Site. AT&T is no aware of any proposed small cell installation within 500 feet of the Site.	ot
☐ Include certification by a registered professional engineer that the pole/or location will safely support the proposed equipment.  See enclosed structural report.	
□ Include written consent from the pole, structure, or facility owner to the installation.  Please see the enclosed letter of authorization from National Grid to seek approval for the small cell facility at the Site. AT&T has entered into a pole attachment agreement with National Grid.  □ Include an affidavit from a Radio Frequency Engineer outlining the network/network service requirements in Andover and how the installations address that need in Andover. Such affidavit should characterize the current level of coverage and how the desired installations will change the current level of coverage, through or with coverage maps, including current and proposed coverage, including a breakdown of "excellent" "good and "poor" reception areas.  Please see the enclosed RF Report and Coverage Maps from AT&T's radio frequency engineer.	1e
☐ Include insurance certificate evidencing workers' compensation and comprehensive general liability coverage for the installation.  Please see the enclosed certificate of insurance.	

The Site is located in the public right-of-way along Route 133 in an area containing commercial uses. The proposed small cell facility will be located on an existing utility pole. The antenna is unobtrusive and is only 24.7" in height. The equipment cabinet is 32" long by 18" wide by 15" deep and will be attached to the pole at least 11'6" from the ground. The closest structure is at 323 Lowell Street and contains a medical facility. The Site is within the public right-of-way but is near the Limited Service and Single Residence C zoning districts and appears to be within the Single Residence C zoning district.

Include a description as to why the desired location is superior to other similar locations, from

□ Include a description of efforts to co-locate the equipment on existing structures, poles, or towers which currently exist or are under construction. A good faith effort to co-locate is required and evidence of such efforts must be included within the application.
AT&T proposes to attach to an existing utility pole.
☐ Include a narrative of how design requirements have been met.
□ Include an affidavit from the applicant which certifies that it will maintain the installations in good repair and according to FCC standards, and will remove any installation not in such good repair, or not in use, within 60 days of being no longer in good repair or no longer in use.  See the enclosed "Letter of Authorization" from AT&T certifying same.
□ Include surety bond on which the Town is obligee, in an amount equal to the cost of installation, to ensure removal of equipment. See enclosed removal bond in the amount of \$25,000.

#### Annual Re-Certification and Affidavit.

- Each year on July 1 the party responsible for the equipment maintenance shall submit an affidavit which shall list, by location, all small cell wireless installations it maintains within the Town of Andover by location, and shall certify: (1) each such installation that remains in use; (2) that such in use installations remain covered by insurance as required by MassDOT; and (3) each such installation which is no longer in use.
- The party responsible for the equipment maintenance shall pay an annual re-certification fee of \$100 per installation which remains in use.
- Any small cell wireless installation which is no longer in use shall be removed by the owner within 60 days of receipt of the annual re-certification affidavit, at that party's expense.
- Any small cell wireless installation which is not removed within 60 days after being listed as no longer in use in the annual re-certification affidavit shall be subject to a fine of \$100/day against the party responsible for the equipment's maintenance until such installation is removed.
- Where such annual re-certification has not been timely submitted, or equipment no longer in use has not been removed within the required 60-day period, no further applications for small cell wireless installations will be accepted by the Town until such time as the annual re-certification has been submitted and all fees and fines paid.

To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions. It is not clear why there is a reference to "MassDOT" above in 3(a). 

Agree to annual re-certification and affidavit and payment as shown above.

Conditions/Prohibitions.

- No small cell wireless installations shall be installed on double poles.
- No small cell wireless installation shall be installed on poles which are not ADA compliant.
- No small cell wireless installations shall remain within the Town right of way or on Town property which has not been certified as in use in the annual re-certification affidavit.

No small cell wireless installation equipment shall be replaced or altered without a reapplication, hearing, and approval from the Board of Selectmen unless the equipment is no longer properly functioning, and it is being replaced with the same or substantially similar equipment.
 To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T

To the extent not preempted by federal or state laws, regulations or orders, and while reserving all rights, AT&T agrees to comply with these provisions.

Agree to Conditions/Prohibitions as set forth in town bylaws and policies.

As submitted by,

As submitted by,						
Jeff Iacoviello, Centerline Communications LLC						
Site Acquisition for AT&T						



### 40 Sylvan Road Waltham MA 02451

June 12, 2019

**Attention: State and Municipal Permitting Authorities** 

RE: Evidence of Pole Attachment Agreement and Consent to File for Permits

**Granted to AT&T Wireless** 

**Sites:** 

Area6\_28; 308 Lowell Street, Andover, MA 01810; Utility pole # 591-84; 42.647652' N, -71.183969 W

Area6\_42; 5 Rasmussen Circle, Andover, MA 01810; Utility Pole #7869; 42.641886 N, -71.190695 W

To Whom It May Concern:

The undersigned jointly owns and controls certain utility poles in public rights-of-way and on private property throughout the geographic areas where it operates.

Please be advised that the undersigned has entered into a Pole Attachment Agreement ("Agreement") authorizing AT&T Wireless ("Applicant") to install, attach, maintain, repair, upgrade and use wireless communications equipment and appurtenances on certain utility poles pursuant to the terms and conditions of the Agreement. Permission is hereby granted to Applicant, or its agents, to make application for any Land Use, Access, Building, Electrical or Regulatory Permit(s) required to effectuate the initial installation, on-going maintenance and upgrades or replacements of said equipment.

Please contact me at (978) 725-1130 if you have any questions.

Amy Sullivan

Sincerelly.

Third Party Attachment Analyst





#### **LETTER OF AUTHORIZATION**

Andover Board of Selectmen 36 Bartlet Street Andover, MA 01810

#### RE: AT&T CRAN // Compliance Memo

Area6\_28 - 308 Lowell Street, Utility Pole # 591-84

New Cingular Wireless PCS, LLC ("AT&T") is proposing a small cell wireless communications facilities at the above referenced properties in order to deal with capacity issues on the network.

AT&T hereby certifies that it will maintain the installations in good repair and according to FCC standards, and will remove any installation not in such good repair, or not in use, within 60 days of being no longer in good repair or no longer in use.

### Regards,

Richard Digitally signed by Richard Detch Detch

Date: 2019.07.09 08:10:05 -04'00'

Richard Detch AT&T Mobility 550 Cochituate Road Suites 13 & 14 Framingham, MA 01701

## RF Report

## Proposed Andover CRAN Facility

(Site Area6\_28- 308 Lowell Street, Utility Pole #591-84, Andover, MA)



July 10, 2019

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### **ATTACHMENTS**

Exhibit 1: Current AT&T coverage in western portion of Andover Exhibit 2: Proposed AT&T coverage in western portion of Andover

#### 1. Overview

New Cingular Wireless PCS, LLC ("AT&T") is providing the following information in support of its application to the Andover Board of Selectmen to construct and operate a telecommunications facility ("Facility") in Andover for its Personal Communication Services. The proposed Facility is to be located on the public right of way adjacent to 308 Lowell Street, Utility Pole #591-84, Andover, MA (the "Site"). The Facility is needed to provide coverage for significant capacity issues that exist along Lowell Street, as discussed in this report. This report addresses AT&T's need for the proposed Facility at the Site and confirms that there are no superior existing structures, buildings or towers in this part of Andover that would meet AT&T's coverage objectives for this area.

Included in this package are a brief summary of the proposed Facility's objectives, an analysis of alternate site candidates considered, and radio frequency ("RF") coverage plots showing the predicted propagation of the proposed Facility based on the antenna mounting height necessary to achieve AT&T's goals.

### 2. AT&T's Proposed Facility

As shown on the zoning drawing plans submitted with the zoning application, AT&T proposes to construct, operate and maintain a small cell personal wireless service Facility consisting principally of the following elements:

- One (1) utility pole (measuring 28" 9' in height).
- One (1) antenna (measuring 25 inches in height) mounted to the existing utility pole.
- One (1) remote radio head units (RRH) shroud (measuring 32 inches in height) ballast mounted on aforementioned utility pole below the antenna.
- Fiber optic and DC power cables running from aforementioned RRH shroud, along the pole, to the new electric meter.

### 3. Coverage and Capacity Objectives

AT&T provides digital cellular communications service and UMTS (also referred as 3G) technology in the 850 MHz and 1900 MHz frequency bands, as well as high speed data services commonly referred to as "long term evolution" ("LTE") operating in the 700, 850, 1900, 2100 and 2300 MHz frequencies, all as allocated by the Federal Communications Commission, ("FCC"). AT&T is recognizing substantial demand growth in wireless data and in efforts to meet current and future demand is bolstering its network using small cells to provide high quality

services covered under license from the FCC.

AT&T has determined that significant capacity demands on the network exist in Andover in the vicinity of I-93 and Rte. 133.

Wireless communication services are no longer limited to providing mobility for voice services. They have evolved to offer a wider range of advanced services to include wide-area voice, data, internet, video, and broadband wireless data, among others, all in a mobile environment. In order to offer these competitive services to local residents and businesses and commuters traveling in and through the Targeted Coverage Area, especially inside buildings, AT&T needs to improve the quality of its coverage by filling in as many of the existing gaps with adequate capacity, quality and signal strengths conducive to in-building and in-vehicle usage, and to provide the same bandwidth requirements in order to meet the increasing demand on the network.

#### 4. Site Search and Selection Process/Candidate Evaluation

To find a site location that provides acceptable service and fills the gaps in coverage and capacity, computer modeling is used to define a search ring. The search ring is designed such that a site located within the ring would have a high probability of completing coverage in the Targeted Coverage Area (assuming that sufficient height is used).

Once the search ring is determined, AT&T's real estate consultants search within the defined area for existing buildings or tower structures of sufficient height that would fill coverage gaps and capacity deficiencies within the network. As more fully explained below, AT&T does not have an existing wireless facility that is capable of providing the required services to the Targeted Coverage Area. From both radio frequency coverage, quality, capacity and zoning perspectives, the proposed site at 308 Lowell Street, Utility Pole #591-84 is found to be best of all alternative site possibilities.

#### 5. Alternative Site Analysis

AT&T has been unable to identify any existing or approved wireless facility or other suitable existing or approved building or tower in the specified search area of Andover from which to address the significant coverage gaps in the Targeted Coverage Area, besides the utility pole located at 308 Lowell Street, Utility Pole #591-84. Target pole is the only allowed use pole that will meet AT&T's coverage objective. The Site would provide the coverage that AT&T's Radio Frequency experts are looking to achieve. Other buildings did not meet height objectives. Likewise, other locations in the areas permitted under the Andover Zoning Bylaw did not meet the coverage objectives. Without a wireless facility at the Site, AT&T would be effectively prohibited from providing adequate coverage.

#### 6. Coverage Plots

To demonstrate why the proposed Facility is necessary, I have developed the following radio frequency coverage maps:

- Exhibit 1, entitled "Current AT&T coverage in western portion of Andover", shows AT&T's existing wireless coverage in and around the Targeted Coverage Area without the Facility.
- Exhibit 2, entitled "Proposed AT&T coverage in western portion of Andover", shows AT&T's proposed coverage in and around the Targeted Coverage Area with the Facility installed at the Site.

These coverage maps were generated using Forsk Atoll, an RF Propagation computer modeling program. The software takes into account the geographical features of an area, antenna models, antenna heights and RF transmitting power. The pie-shaped symbols depict existing wireless facility site locations. The areas in blue will have adequate outdoor or "in-vehicle" coverage, but insufficient signal strength for reliable in-building service. The areas in green will have good in-building service as well.

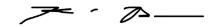
The map showing coverage without the proposed Facility indicates that AT&T cannot achieve its coverage objective with currently existing sites. Accordingly, the proposed Facility at the Site is necessary to fill coverage gaps, address capacity issues and upgrade AT&T's wireless service in and around the Targeted Coverage Area.

#### 7. Summary

No other existing structures are better suited than the subject Site to provide the coverage and capacity requirements needed for this area of Andover, Massachusetts. The location and the Facility configuration were chosen to achieve an optimal balance between meeting coverage objectives and minimizing the aesthetic impact to the community while fully complying with the Andover Zoning Bylaw. The Facility will comply with all applicable FCC regulations regarding RF emissions and other matters. The proposed Facility site is feasible and appropriate, and will improve wireless service along Memorial Drive and the surrounding vicinity.

#### 8. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate.



Kevin Breuer, RF Engineer AT&T Mobility 62946219 v2

7/10/2019

Date

# TOWER / STRUCTURE / ANTENNA / EQUIPMENT REMOVAL BOND

	308 Lowell St, Andover, MA
	Site:Area 6-28 CRAN
	Fixed Asset No 14814909
	Bond Number: 107085184
KNOW ALL MEN BY THESE PRESENTS:	
THAT New Cinquiar Wireless PCS_LLC_550 Cochit	uate Road Framinghom MA 04704
THAT New Cingular Wireless PCS, LLC, 550 Cochit Principal, and Travelers Casualty and Surety Company of An	nerica a cornoration duly organized
under the laws of the State of Connecticut	as Surety, are held and firmly bound
unto Town of Andover, 36 Bartlett Street as Obligee, the penal sum of Twenty-f  \$25,000.00	t, Andover, MA 01810
(	ive Thousand And No/100
heirs, executors, administrators, successors and assigns, joi the liability of the surety being limited to the penal sum of this bond is in effect.	bond regardless of the number of years the
WHEREAS, the Principal has entered into a written placement of a tower, structure or equipment furnishing telescrice, which agreement sets forth the terms and conditionstructures or equipment and which agreement is hereby specific.	ephone, television or other electronic media
WHEREAS, the	agreement and/or the property cement, removal or relocation of said tower
NOW THEREFORE, the condition of this obligation is shall perform in accordance with the aforesaid ordinance an against all loss caused by Principal's breach of any ordinance replacement, removal or relocation of a tower, structure or explacement or remain in full force and effect unless cancelled as	id/or agreement, and indemnify the Obligee e or agreement relating to the maintenance, quipment, then this obligation shall be void,
THIS BOND may be cancelled by Surety by giving _ Obligee by certified mail. Such cancellation shall not affect a bond prior to the effective date of the termination.	s set forth below.  30 days written notice to the ny liability the surety has incurred under this.
PROVIDED that no action, suit or proceeding shall be inless the action is brought within twelve (12) months of the c	maintained against the Surety on this bend ancellation date of this bond.
SIGNED and sealed this day of Ju	ine,,
New Cingula	r Wireless PCS, LLC
Principal: by AT&T Mo	bility Corporation its manager
Store Store Store	Stacy Roth Assistant Treasure
HARTFORD, Supply: Travelers Ca	sualty and Surety Company of America
phid	i a Ublheisen

Heidi A. Notheisen, Attorney-in-Fact



Travelers Casualty and Surety Company of America Travelers Casualty and Surety Company St. Paul Fire and Marine Insurance Company

#### POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint Pamela A. Beelman, Heldi A. Notheisen, Cynthia L. Choren, Debra C. Schneider, JoAnn R. Frank, Karen L. Roider, Sandra L. Ham, and Brittany D. Clavin, of St. Louis, Missouri, their true and lawful Attorney-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

INWITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this 3rd day of February, 2017.







State of Connecticut

City of Hartford ss.

Robert L. Raney, Seftfor Vice President

On this the 3rd day of February, 2017, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.

My Commission expires the 30th day of June, 2021



Marie C. Tetreault, Notary Public

Mughes, Assistant Secretary

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary of Travelers Casualty and Surety Company of America of Toyolers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, do hereby certify that the above and foregoing is a true and forrect copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 19th

day of June







2019



#### CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 1/16/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Insurance Office of America, Inc.	CONTACT NAME: Kaylee Onnen				
854 Washington Street NW Suite 200	PHONE (A/C, No, Ext): 770-250-0213 FAX (A/C, No): 678-450-9180  E-MAIL ADDRESS: Kaylee.Onnen@ioausa.com				
Gainesville GA 30501	INSURER(S) AFFORDING COVERAGE	NAIC#			
	INSURER A: American Automobile Insurance Compa	any 21849			
INSURED CENTCOM-07	INSURER B: Endurance American Insurance Compa	ny 10641			
Centerline Communications, LLC 750 W. Center Street, Floor 3	INSURER C: Redwood Fire & Casualty Insurance Co	mpany 11673			
West Bridgewater MA 02379	INSURER D: Continental Divide Insurance Company	35939			
•	INSURER E: Navigators Insurance Company	42307			
	INSURER F: AGCS Marine Insurance Company	22837			

**COVERAGES CERTIFICATE NUMBER:** 668002971 **REVISION NUMBER:** 

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	s
Α	X COMMERCIAL GENERAL LIABILITY  CLAIMS-MADE X OCCUR			MZG80999008	8/18/2019	8/18/2020	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 1,000,000 \$ 1,000,000
							MED EXP (Any one person)	\$10,000
							PERSONAL & ADV INJURY	\$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$ 2,000,000
	X POLICY PRO- JECT LOC						PRODUCTS - COMP/OP AGG	\$ 2,000,000
	OTHER:							\$
A	AUTOMOBILE LIABILITY			MZG80999008	8/18/2019	8/18/2020	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000
^	X ANY AUTO			MZA07184489	8/18/2019	8/18/2020	BODILY INJURY (Per person)	\$
	OWNED SCHEDULED AUTOS ONLY						BODILY INJURY (Per accident)	\$
	X HIRED AUTOS ONLY X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	\$
								\$
A B	X UMBRELLA LIAB X OCCUR			CGU15442882 EXC30000750201	8/18/2019 8/18/2019	8/18/2020 8/18/2020	EACH OCCURRENCE	\$1,000,000
_	X EXCESS LIAB CLAIMS-MADE			EXC30000750201	0/10/2019	0/10/2020	AGGREGATE	\$1,000,000
	DED RETENTION\$						Each Occ/Agg	\$4,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			CEWC035695 CEWC036294 - FL & OR	8/18/2019 8/18/2019	8/18/2020 8/18/2020	X PER OTH- STATUTE ER	
_	ANYPROPRIETOR/PARTNER/EXECUTIVE	N/A		CEWC030294 - FL & OR	6/16/2019	6/16/2020	E.L. EACH ACCIDENT	\$1,000,000
	(Mandatory in NH)	.,,,					E.L. DISEASE - EA EMPLOYEE	\$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$1,000,000
HН	Excess Liability (\$5M x \$4M) Installation Floater Leased/Rented Equipment			IS19EXCZ027XAIV MZI93079248	8/18/2019 8/18/2019	8/18/2020 8/18/2020	Each Occ/Agg Limit Limit	\$5,000,000 \$1,000,000 \$500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

General Liability: CG7158 01/14 Multicover; CG2001 04/13 Primary and Noncontributory - Other Insurance Condition; CG2037 04/13 Additional Insured -Owners, Lessees or Contractors – Completed Operations.

Auto Liability: CA7052 10/14 Fleetcover Endorsement - Pennsylvania; CA7106 04/14 Additional Insured – Primary and Non-Contributory with Other Insurance; CA7018 10/01 Fleetcover Endorsement; CA0449 11/16 Primary and Non-Contributory with Other Insurance.

Umbrella: 5400 10/03 Quick Reference The Fund Umbrella Workers Compensation: WC000313 04/84 Waiver of Our Right to Recover From Others Endorsement; WC990410C 01/19 Waiver of Our Right to Recover from

Others Endorsement - California Blanket Basis

Reference: Site: 10071565 / MA2246

CERTIFICATE HOLDER	CANCELLATION
	SHOULD ANY OF THE ABOVE DESCRIBED POL THE EXPIRATION DATE THEREOF, NOTIC

\*\*\* PROOF OF INSURANCE \*\*\* 750 W Center St Floor 3 West Bridgewater MA 02379

ICIES BE CANCELLED BEFORE E WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

**ULS License** 

# Wireless Communications Service License - KNLB200 - New Cingular Wireless PCS, LLC

M This license has pending applications: 0007815643

Call Sign KNLB200 Radio Service WS - Wireless Communications

Service

Status Active Auth Type Regular

**Rural Service Provider Bidding Credit** 

Is the Applicant seeking a Rural Service Provider (RSP)

bidding credit?

**Reserved Spectrum** 

Reserved Spectrum

Market

Market MEA001 - Boston Channel Block B

Submarket 0 Associated 002310.000000000-Frequencies 002315.00000000

(MHz) 002355.000000000-002360.00000000

Dates

Grant 09/27/2010 Expiration 07/21/2017

Effective 07/21/2017 Cancellation

**Buildout Deadlines** 

1st 03/13/2017 2nd 09/13/2019

**Notification Dates** 

1st 03/03/2017 2nd

Licensee

FRN 0003291192 Type Limited Liability Company

Licensee

 New Cingular Wireless PCS, LLC
 P:(855)699-7073

 208 S. Akard St., RM 1016
 F:(214)746-6410

 Dallas, TX 75202
 E:FCCMW@att.com

ATTN Leslie A. Wilson

**Contact** 

AT&T Mobility LLC P:(202)457-2055 F:(202)457-3073

1120 20th Street, NW - Suite 1000 E:michael.p.goggin@att.com

Washington, DC 20036 ATTN Michael P. Goggin

**Ownership and Qualifications** 

Radio Service Type Fixed, Mobile

8/6/2019

Regulatory Status Common Carrier, Non-Common Interconnected

Yes

**Alien Ownership** 

The Applicant answered "No" to each of the Alien Ownership questions.

**Basic Qualifications** 

The Applicant answered "No" to each of the Basic Qualification questions.

**Tribal Land Bidding Credits** 

This license did not have tribal land bidding credits.

Carrier

**Demographics** 

Race

Ethnicity Gender

**ULS** License

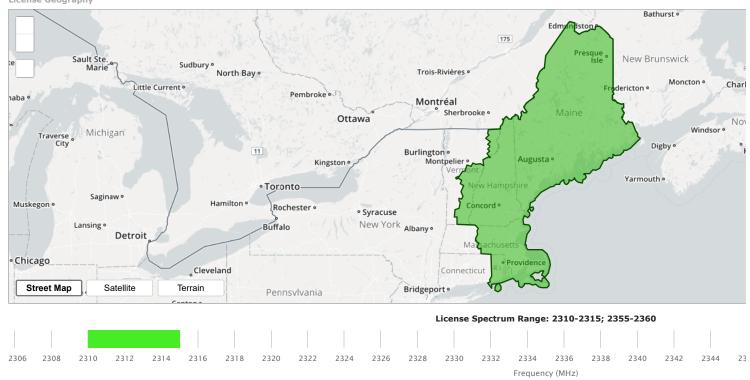
Wireless Communications Service License - KNLB200 - New Cingular Wireless PCS, LLC

#### Map

Call SignKNLB200Radio ServiceMarketMEA001 - BostonChannel BlockSubmarket0Associated Frequencies (MHz)

Auction 14 - WCS

#### License Geography



**ULS** License

### PCS Broadband License - KNLF954 - AT&T Mobility Spectrum LLC

Call Sign

KNLF954

Radio Service

CW - PCS Broadband

Status

Active

Auth Type

Regular

#### Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP)

bidding credit?

#### Reserved Spectrum

Reserved Spectrum

Market

Market

BTA051 - Boston, MA

Channel Block

D

Submarket

Associated Frequencies

(MHz)

001865.000000000-001870.00000000 001945.00000000-

001950.00000000

**Dates** 

Grant

06/29/2017

Expiration

06/27/2027

Effective

09/21/2018

Cancellation

**Buildout Deadlines** 

1st

06/27/2002

2nd

**Notification Dates** 

1st

04/01/1999

2nd

Licensee

FRN

0014980726

Type

Limited Liability Company

Licensee

AT&T Mobility Spectrum LLC 208 S. Akard St., RM 1015 Dallas, TX 75202

ATTN Cecil J Mathew

P:(855)699-7073

F:(214)746-6410 E:FCCMW@att.com

**Contact** 

AT&T Mobility LLC Cecil J Mathew 208 S Akard St. RM 1015 Dallas, TX 75202 ATTN Michael P. Goggin

P:(855)699-7073 F:(214)746-6410 E:FCCMW@ATT.COM

Ownership and Qualifications

Radio Service Type Regulatory Status

Mobile

Common Carrier

Interconnected

Yes

**Alien Ownership** 

The Applicant answered "No" to each of the Alien Ownership questions.

#### **Basic Qualifications**

The Applicant answered "No" to each of the Basic Qualification questions.

#### **Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender



June 5, 2019





Centerline Communications, LLC 750 West Center Street Suite #301 West Bridgewater, MA 02379

RE:

Structural Assessment

Site Name: Site Address:

Area6\_28A 308 Lowell Street Andover, MA 01810

To Whom It May Concern:

Hudson Design Group LLC (HDG) has been authorized by AT&T to perform a structural assessment on the existing utility pole to determine its capability of supporting the AT&T equipment.

Based on our evaluation, we have determined that the existing utility pole #591/84 **IS CAPABLE** of supporting the proposed equipment installation. Reference the latest HDG drawings for the existing equipment location and connection details. Calculations submitted upon request.

This assessment was conducted in accordance with EIA/TIA-222-G, Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, the National Electric Safety Code 2017 (NESC), the International Building Code 2015, the ASCE 7-10, and the Massachusetts State Building Code, 9th edition.

This determination was based on the following limitations and assumptions:

- 1. Equipment and locations should not deviate from the HDG drawings without written approval of the engineer.
- 2. HDG is not responsible for any modifications completed prior to and hereafter which HDG was not directly involved.
- 3. All structural members and their connections are assumed to be in good condition and are free from defects with no deterioration to its member capacities. Contractor to perform pre-inspection prior to construction.
- 4. All antennas, coax cables and waveguide cables are assumed to be properly installed and supported as per the manufacturer requirements.
- 5. HDG could not verify the existing wood pole burial depth. HDG is under the assumption that the burial depth meets the minimum requirements per the North American Wood Pole Coalition Technical Bulletin – The Wood Pole 2005: Design Considerations, Service Benefits, and Economical Reward.
- 6. HDG did not perform any geotechnical analysis / or / investigation. Soil Information is unknown.

Please feel free to contact our office should you have any questions.

Respectfully Submitted, Hudson Design Group LLC

fulue a

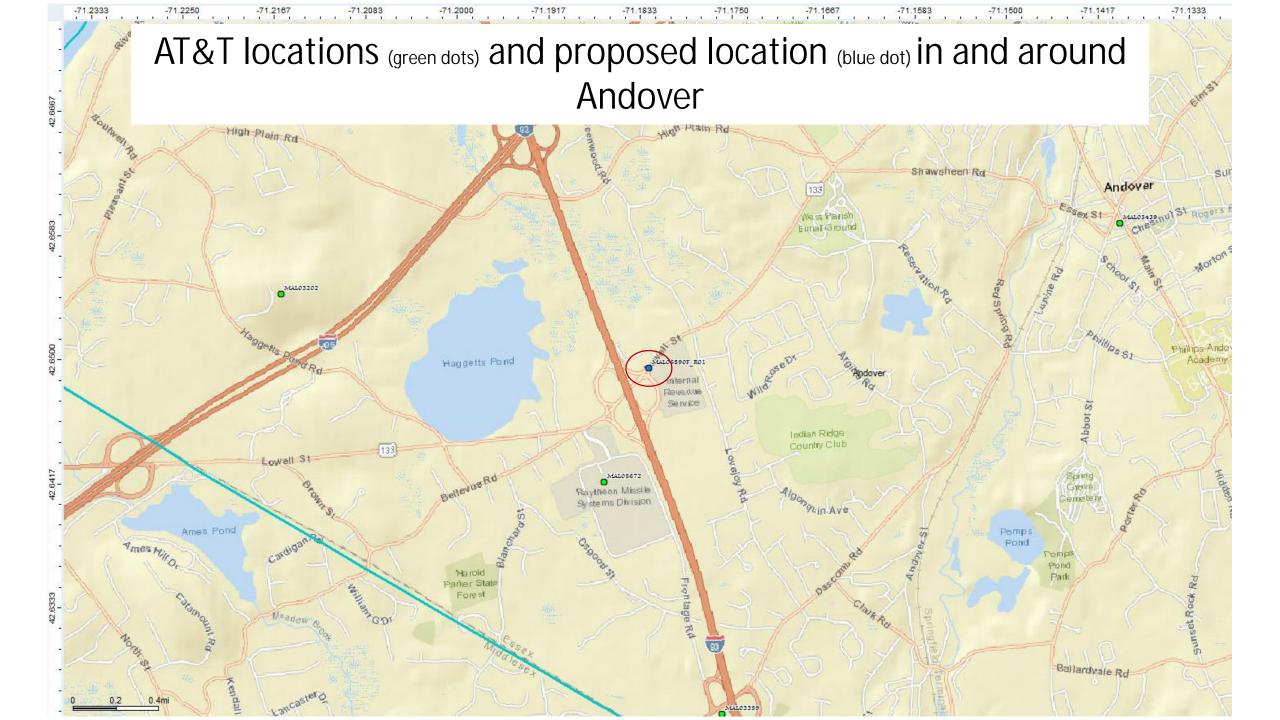
Michael Cabral Structural Dept. Head Daniel P. Hamm, PE Principal

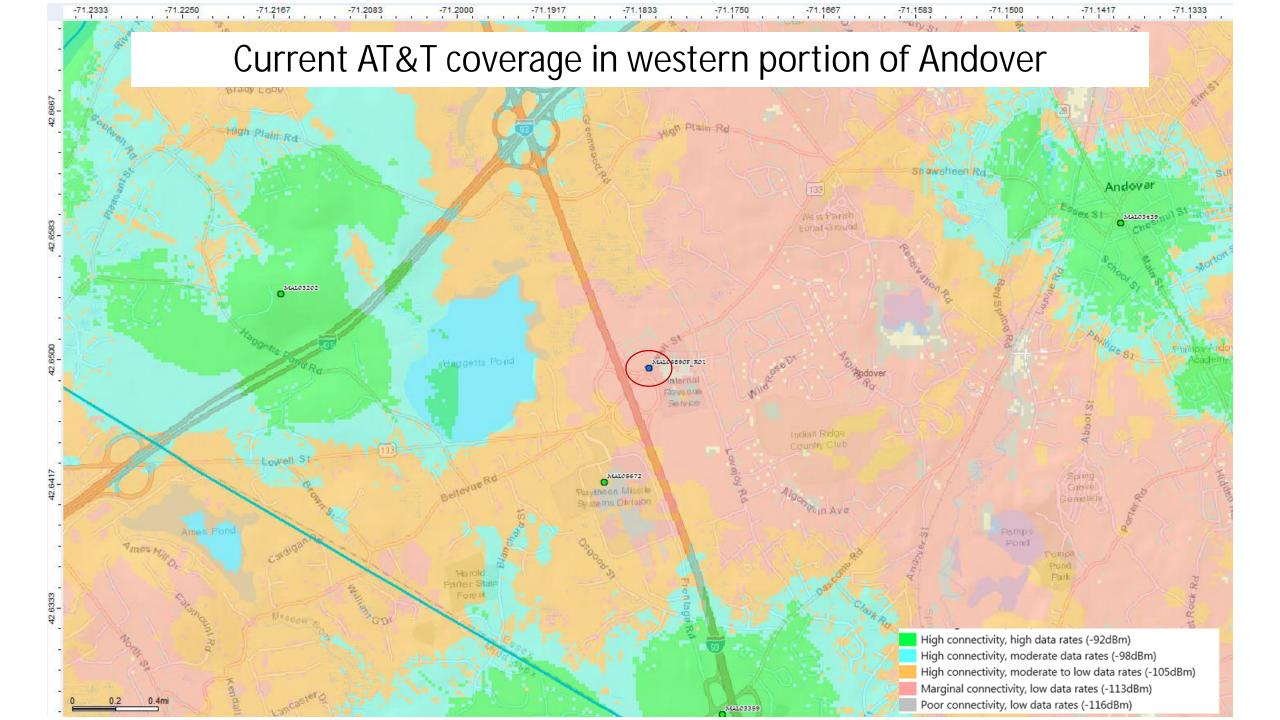
HAMM

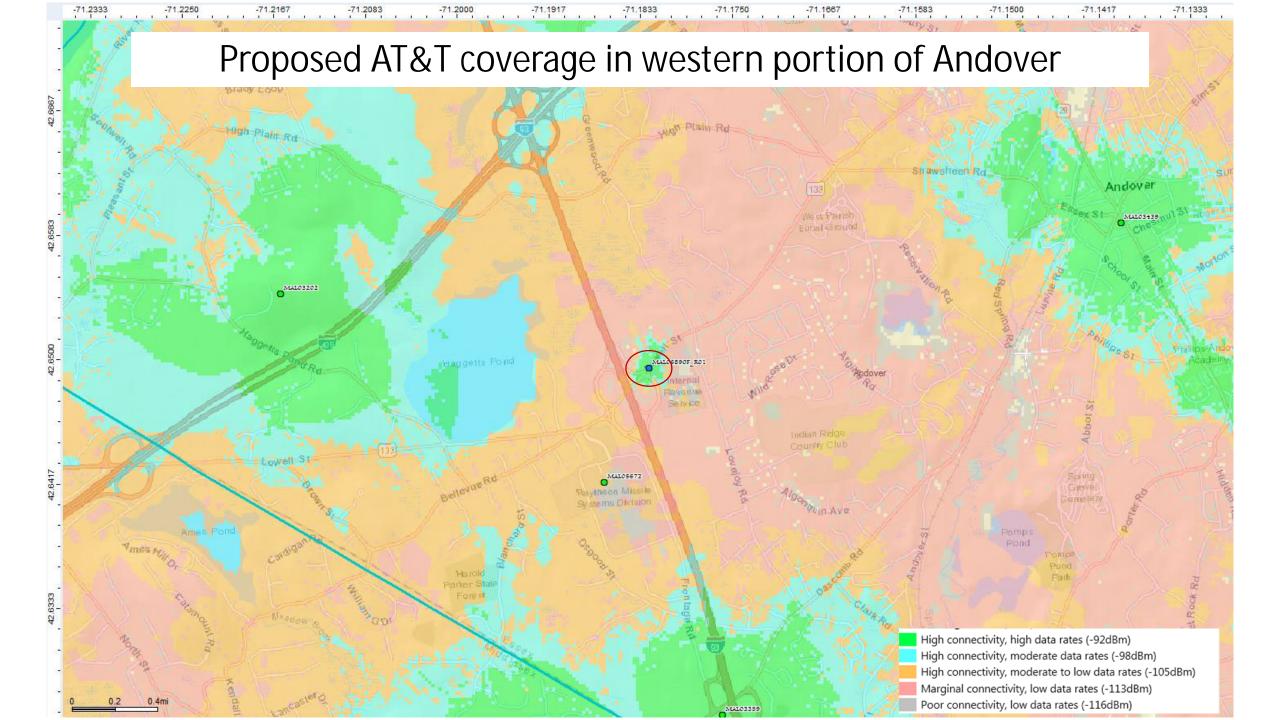
CIVIL

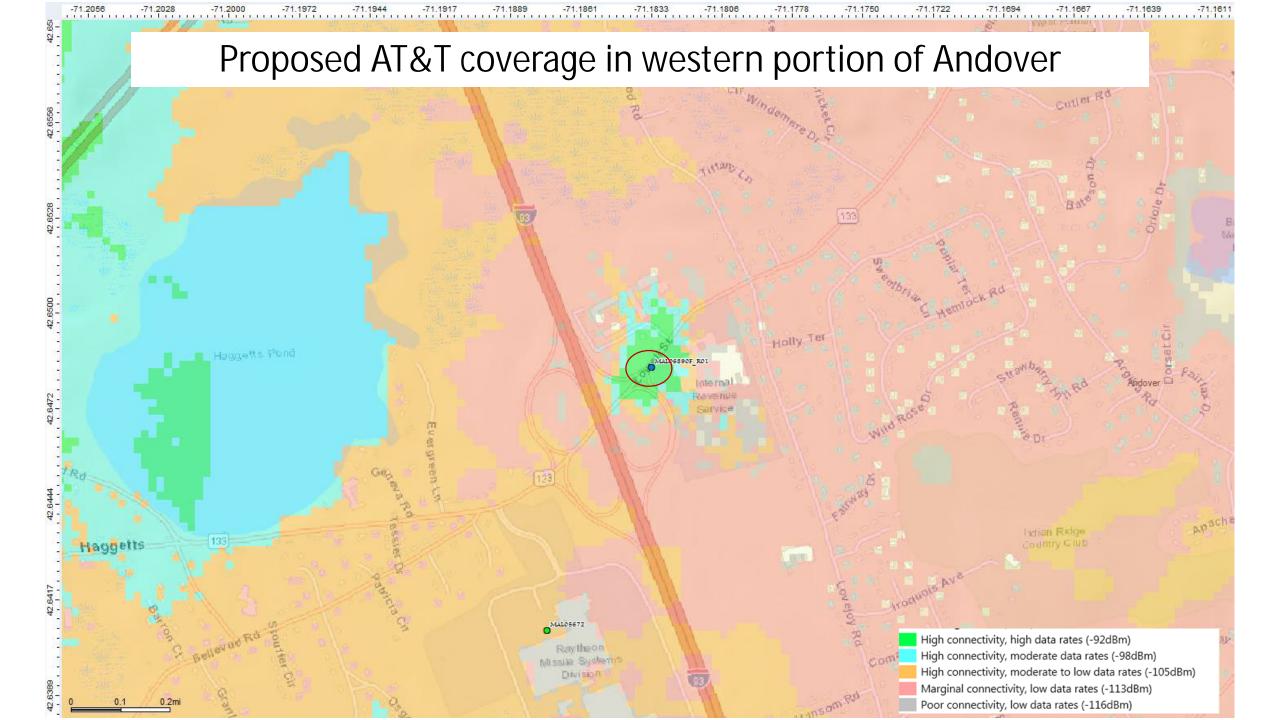
## Area6\_28: Location Selection Description and Reasoning

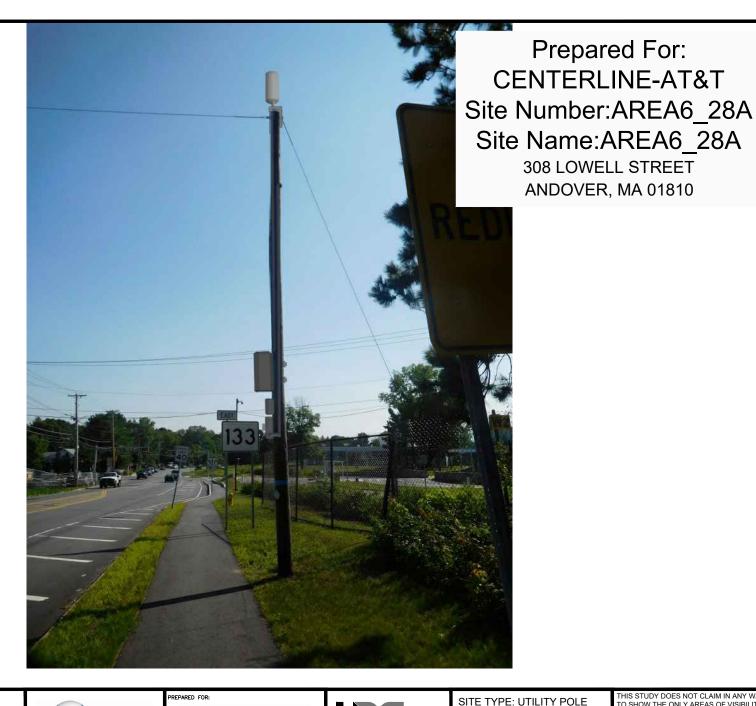
Proposed location is located just past the end of the 93 north off ramp. There are no residential structures directly abutting or within view from the target pole. Proposed location is to provide coverage and capacity to a heavy traffic area. Target pole is the only allowed use pole that will meet AT&T's coverage objective.











SITE NO: AREA6\_28A
SITE NAME: AREA6\_28A

ADDRESS: 308 LOWELL STREET ANDOVER, MA 01810



FRAMINGHAM, MA 01701





DATE: 06/06/2019 | REV: 0

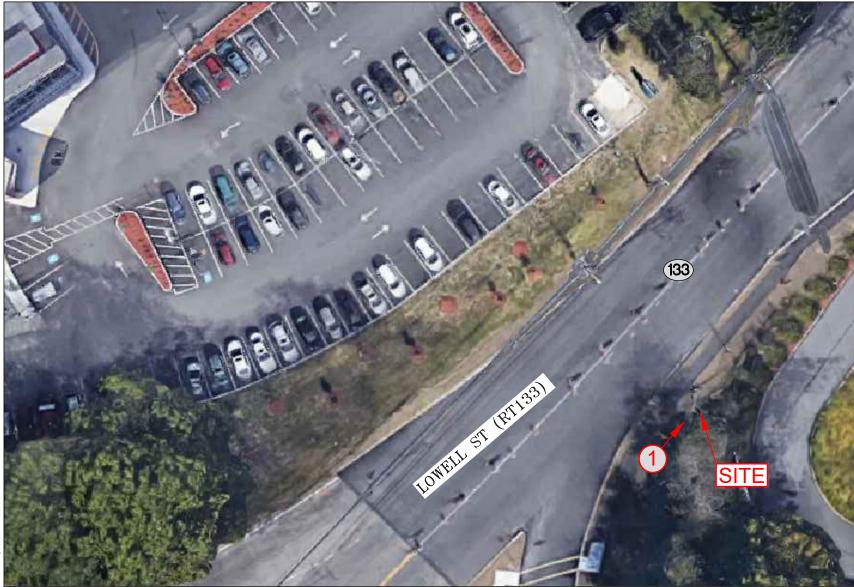
SCALE: N.T.S.

THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.

PAGE 1 OF 4

# LOCUS MAP

# TAKEN FROM GOOGLE.COM ON 06-06-19



SITE NO: AREA6\_28A SITE NAME: AREA6\_28A

ADDRESS: 308 LOWELL STREET ANDOVER, MA 01810



550 COCHITUATE ROAD

FRAMINGHAM, MA 01701





**LEGEND:** 

SITE TYPE: UTILITY POLE DATE: 06/06/2019 REV: 0

DIRECTION OF VIEW

DRAWN BY: KAM

TO SHOW THE ONLY AREAS OF VISIBILITY REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.

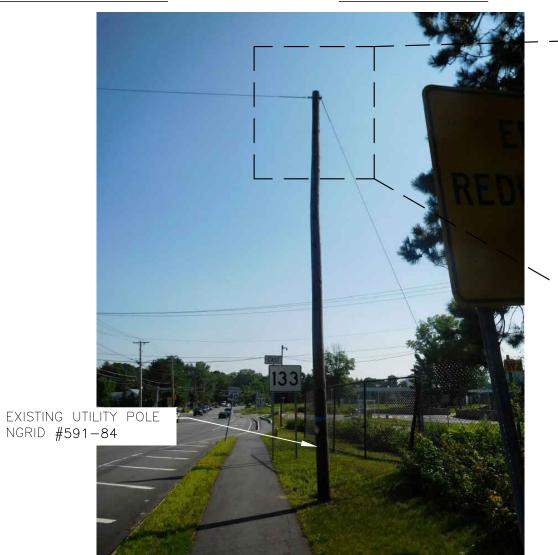
PHOTO LOCATION

PAGE 2 OF 4

# **EXISTING CONDITIONS**

# **LOCATION #1**

# DATE OF PHOTO: 07/20/2017





**DETAIL OF EQUIPMENT** 

VIEW NORTHEAST FROM LOWELL ST

SITE NO: AREA6\_28A SITE NAME: AREA6\_28A

ADDRESS: 308 LOWELL STREET ANDOVER, MA 01810



550 COCHITUATE ROAD

FRAMINGHAM, MA 01701

CENTERLINE 95 RYAN DRIVE RAYNHAM, MA 02767



SITE TYPE: UTILITY POLE DATE: 06/06/2019 REV: 0 DRAWN BY: KAM

BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE. SCALE: N.T.S.

PAGE 3 OF 4

TO SHOW THE ONLY AREAS OF VISIBILITY

REPRESENTATION OF AREAS WHERE THE

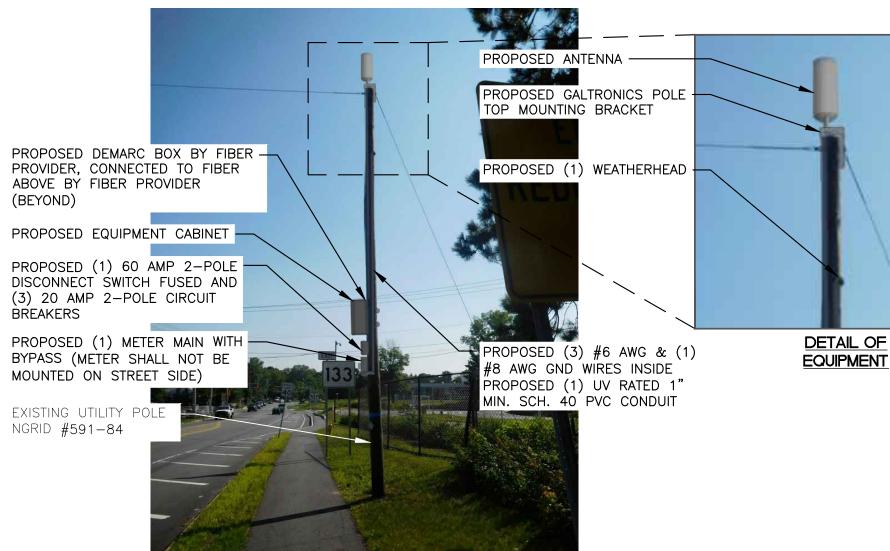
PROPOSED INSTALLATION MAY BE VISIBLE

IT IS MEANT TO SHOW A BROAD

# PROPOSED CONDITIONS

# LOCATION # 1

# DATE OF PHOTO: 07/20/2017



VIEW NORTHEAST FROM LOWELL ST

SITE NO: AREA6\_28A
SITE NAME: AREA6\_28A

ADDRESS: 308 LOWELL STREET ANDOVER. MA 01810



550 COCHITUATE ROAD FRAMINGHAM, MA 01701 95 RYAN DRIVE RAYNHAM, MA 02767





DATE: 06/06/2019

DRAWN BY: KAM

SCALE: N.T.S.

SITE TYPE: UTILITY POLE

REV: 0

THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS A VALIABLE TO DATE.

PAGE 4 OF 4

#### **brown**rudnick

Edward D. Pare, Jr., Esq. direct dial: 401-276-2639 epare@brownrudnick.com

December 9, 2019

Town of Andover Board of Selectmen c/o Andrew P. Flanagan Office of the Town Manager 36 Bartlet Street Andover, MA 01810

Re: Application for Small Cell Wireless Installation on Existing Utility Pole Near 308 Lowell Street, Andover, Massachusetts - Supplemental Information Based on Interdepartmental Review Meeting

Dear Members of the Andover Board of Selectmen:

As you may recall, we represent New Cingular Wireless PCS, LLC ("AT&T") with respect to the above referenced small cell facility application. On October 15, 2019, we participated in an Interdepartmental Review meeting and presented AT&T's small cell facility project to those departmental officials in attendance. At the meeting, certain town officials requested additional information which we provide as follows:

- 1. We note that the existing utility pole upon which AT&T intends to attach its small cell facility is located in a right-of-way controlled by the Massachusetts Department of Transportation ("MassDOT"). AT&T submitted an application to MassDOT and recently obtained MassDOT's approval, a copy of which is attached. As you may know, MassDOT also requires approval from the Town of Andover.
- 2. Fire Chief Michael Mansfield requested that AT&T's radio frequency engineer contact him to discuss AT&T's small cell facility and any potential impact on Andover's emergency communications. Based on our recent discussions with Chief Mansfield, we understand that his concerns and questions have been satisfactorily addressed by AT&T.
- 3. The Engineering Division of the Andover Department of Public Works requested that the power and fiber paths to the small cell facility be included on AT&T's drawings. AT&T consulted with these utility providers and attached are revised drawings showing the paths for the power and fiber; both utilities will be provided overhead. Please substitute the enclosed updated drawings for the drawings submitted with the original application

We believe we have addressed the outstanding issues based on the comments at the above-referenced Interdepartmental Review meeting and we are ready to proceed with the public hearing before the Andover Board of Selectmen.



Town of Andover December 9, 2019 Page 2

If you have any questions, please don't hesitate to contact us. We look forward to presenting this application at the next available meeting of the Andover Board of Selectmen.

Sincerely,

**BROWN RUDNICK LLP** 

Edward D. Pare, Jr., Esq. (Jad)

63478543 v3-WorkSiteUS-024519/1096





4-2019-0537

## ANDOVER Small Cell Wireless - Install on Existing Pole or Structure

Subject to all the terms, conditions, and restrictions printed or written below, permission is hereby granted to NEW CINGULAR WIRELESS PCS, LLC (AT&T) to enter upon the State Highway known as ROUTE 133 or LOWELL STREET @ ROUTE 93 OFF-RAMP for the purpose of installing a wireless antenna, a remote radio head and associated appurtenances to existing utility pole #591-84 located within the shoulder area on the southerly side of the roadway at approximate station 129+57. All work will be performed as per plans and documents submitted and on file at the MassDOT Highway Division District Four Permits Office.

A copy of this permit must be on the job site at all times for inspection. Failure to have this permit available will result in suspension of the rights granted by this permit until such permit is made available.

No equipment, trucks, workers, etc., shall occupy any part of the traveled way except between the hours of 9:00 A.M. and 3:00 P.M. Monday thru Friday. Except for an emergency, in no case will operations exceed the specified hours without the prior approval of the District Highway Director or an authorized Representative. This includes the placement of traffic control devices, vehicles, equipment or anything that restricts the flow of traffic through the construction zone. Emergencies must be unexpected situations or sudden occurrences of a serious and urgent nature that demand immediate attention.

No work shall be done under the terms of this permit on Saturdays, Sundays or Holidays.

No work will be performed on the day before or the day after a holiday or a long weekend which involves a holiday on any highway, roadway or property under the control of the MassDOT Highway Division or in areas where the work would adversely impact the normal flow of traffic on the State Highway System, without permission of the District Highway Director or an authorized Representative.

The Grantee shall not engage in any work under benefit of this Permit until a MassDOT Roadway Work Notification Form (attached) is filed with the District Permit Office prior to the start of work. The form must contain the required information and have the proper signatory approval. The form must be submitted no later than 12:00 PM on the Wednesday prior to the week the work will begin. The duration of work approvals shall be limited to one week at a time. If the work exceeds one week then a new Roadway Work Notification Form is required to be submitted for each additional week. The Grantee can fax the completed form to MassDOT at 781.646.5115.

No trees shall be cut or removed under this permit.

Provisions shall be made for the safety and protection of Pedestrian Traffic during the construction period.

It shall be the responsibility of the Grantee to provide access to the property of residents and business owners during the progress of the proposed work.

All above-ground structures installed under this permit shall be properly secured and protected so that they shall not be a hazard to or be damaged by the general public.

Any changes to the construction or traffic management plans impacting State Highway or traffic operations must be submitted for approval prior to implementation.

If it becomes necessary to relocate the existing work area to a location other than specified in this permit then the Grantee shall apply for an additional permit to cover this project.

The Completion of Work Form shall be sent to the Grantor as soon as possible after the completion of the physical work.

WORK HOURS: 9:00 A.M. thru 3:00 P.M. Monday thru Friday.

The Grantee shall contact the Area Contact Person (7:30 AM to 4:00 PM Monday through Friday ONLY) at 617.279.7203, two (2) working days prior to the start of work.

All work shall be in compliance with the 1988 Edition of the "Massachusetts Highway Department Standard Specifications for Highways and Bridges", and Supplemental Specifications Dated July 1, 2015.

The Contractor is responsible to ensure that all contractor personnel, including all subcontractors, working on the project are issued and are wearing all necessary personal protective safety equipment while working within the project limits. This equipment shall include, as a minimum, a hardhat and a safety vest, regardless of the type of work being performed. Other safety equipment shall be added as required to perform the work in which they are engaged and in accordance with all local, state and federal requirements in effect.

Uniformed Police Officers with their official vehicles shall be in attendance at all times while work is being done under this permit.

The furnishing and erecting of all required signs and traffic safety devices shall be the responsibility of the Grantee.

All signs and devices shall conform to the 2009 edition of the Manual on Uniform Traffic Control Devices (MUTCD) with the Commonwealth of Massachusetts Amendments. Sign both sides of multi-lane approach. Signs denoting "END HIGHER FINES" (or similar legend) must be provided at the downstream end of the work zone or other area where the increased fines are in effect.

Cones and non-reflecting warning devices shall not be left in operating position on the highway when the daytime operations have ceased. If it becomes necessary for this Department to remove any construction warning devices or their appurtenances from the project due to negligence by the Grantee all costs for this work will be charged to the Grantee.

Flashing arrow boards will be used at all times when operations occupy the roadway and shall be available for use at all times.

All warning devices shall be subject to removal, replacement and repositioning by the Grantee as often as deemed necessary by the Engineer.

When in the opinion of the Engineer, this operation constitutes a hazard to traffic in any area, the Grantee may be required to suspend operations during certain hours and to remove his equipment from the roadway.

It is imperative that construction operations are managed so that motorists travel "delay" is minimized. At any time during the operation when a traffic delay of over twelve (12) minutes occurs and the situation is worsening, the Grantee will begin to suspend operations. Continuously increasing "delays" of over twelve (12) minutes are not to be permitted and may result in the termination of this Permit by the Department.

The Grantee will be responsible for any damage caused by this operation to curbing, structures, roadway, etc.

The Grantee shall be responsible for any settlement which may occur as a result of the work done under this permit.

The Grantee shall be responsible for any ponding of water which may develop within the State Highway Layout, caused by this work.

In the event of inclement weather (snow, ice, dense fog etc.), which lessens the visibility of advanced warning signs, vehicles and workers, the Grantee will suspend all operations. In the event of snow or icing conditions, all vehicles and equipment must be removed from the roadway and/or shoulder area so as not to interfere with snow and ice operations.

No work shall be authorized during snow, sleet, or ice storms and subsequent snow and ice operations.

The State Highway Layout shall be kept clean of debris of any nature at all times and shall be thoroughly cleaned at the completion of this permit.

At the completion of this permit, all disturbed areas shall be restored to a condition equal or better to that which existed prior to the work.

Any grass areas disturbed within the State Highway Layout shall be graded, loamed to a depth of 4" and seeded.

If the sidewalk area is disturbed, it shall be restored, full width, in kind a minimum of five feet beyond any disturbed area.

If the existing guardrail is removed or damaged it shall be reset or replaced to Massachusetts Highway Standards. This work shall be performed by an approved contractor.

If the existing sideline fence is removed or damaged it shall be reset or replaced to Massachusetts Highway Standards.

Any bound marked MHB shall not be removed or disturbed. If it becomes necessary to remove and reset any highway bounds then the Grantee shall hire a Registered Professional Land Surveyor to perform this work. It shall be the

responsibility of this land surveyor to submit to this office a statement in writing and a plan containing his stamp and signature showing that said work has been performed.

This permit is issued with the stipulation that it may be modified or revoked at any time at the discretion of the District Four Highway Director or an authorized Representative without rendering said Department or the Commonwealth of Massachusetts liable in any way.

The Grantee shall indemnify and save harmless the Commonwealth and its Highway Department against all suits, claims or liability of every name and nature arising at any time out of or in consequence of the acts of the Grantee in the performance of the work covered by this permit and or failure to comply with terms and conditions of the permit whether by themselves or their employees or subcontractors.

APPLICANT'S REPRESENTATIVE: Craig Cody

**TELEPHONE NUMBER: (781) 831-1281** 

The Permit shall be void unless the work herein contemplated shall have been completed before November 26, 2020.

Dated at Arlington this 26th day of November, 2019.

**Approved Signature** 

Paul D. Stedman

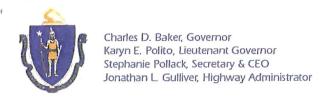
**District Highway Director** 

LFR/lfr



## MASSACHUSETTS Roadway Work Notification Form Page: 1 of 1

Start Date: \_\_\_\_ Start Time: \_\_\_ End Date: \_\_\_\_ End Time: Construction: No. Maintenance Crew Bridge Inspection Other: Permit Project: No. District: City/Town: O Roadway: \_\_\_\_\_ Direction: NB EB SB WB OTHER Bridge No.: (Roadway, Waterway, Railroad, Other) (Roadway) Ramp Closures: Exit # \_\_\_\_ From, \_\_\_\_\_\_(Roadway & Direction) То, \_\_\_\_ (Roadway & Direction) Brief Description of Work: (Attach second sheet for multiple lane closures or additional information) S = Shoulder L = Travel Lane M = Median O = Open X = Closed Radio ID: Contact Person: Cell Phone: Office Phone: Recommended: Approved: Date:





#### Completion of Work

You may proceed with the work described within this Permit, which has been issued to you by the Massachusetts Department of Transportation (MassDOT).

Your attention is called to the time frame allowed for completion of said work. If an extension of time is required or an alteration to any of the permit conditions becomes necessary, application for such changes should be made as soon as possible to the District Highway Director.

Upon completion of the work, please fill out this form and forward it to: Massachusetts Department of Transportation, District Four, 519 Appleton Street, Arlington, MA 02476.

## IF THIS NOTICE IS NOT RETURNED, THE LIABILITY ASSUMED UNDER THIS PERMIT WILL CONTINUE.

By Authority of the Massachusetts Department of Transportation District Four Highway Director.

I hereby notify you that the work outlined and a	authorized under the terms and conditions of
MassDOT Permit No.	_ has been completed in accordance with all
requirements of MassDOT. The date of completion	n:
Permit Grantee:	
Signed:	
City/ Town:	
Date:	



## AT&T SITE ID: AREA6\_28A 308 LOWELL STREET ANDOVER, MA 01810



#### **GENERAL NOTES**

- 1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF AT&T. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.
- THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY
  ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE
  DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT
  GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
- 3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T MOBILITY REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.
- CONSTRUCTION DRAWINGS ARE VALID FOR SIX MONTHS AFTER ENGINEER OF RECORD'S STAMPED AND SIGNED SUBMITTAL DATE LISTED HEREIN.

#### DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE PROJECT OWNER'S REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

#### PROJECT SUMMARY

DESCRIPTION

TITLE SHEET

KEY PLAN AND ELEVATION

ELECTRICAL & GROUNDING DETAILS

FIBER PATH ROUTING (DESIGN BY OTHERS)

IMPROVING CELLULAR AND WIRELESS INTERNET SERVICE.

ONE TRIP PER MONTH AT ONE HOUR PER VISIT.

**EQUIPMENT DETAILS** 

GN-1 GENERAL NOTES

SITE ADDRESS:

308 LOWELL STREET

**SHEET INDEX** 

PROJECT DESCRIPTION

INSTALLATION OF ANTENNA AND ASSOCIATED EQUIPMENT ON EXISTING UTILITY

THIS IS AN UNMANNED AND RESTRICTED ACCESS EQUIPMENT SITE AND WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNALS FOR THE PURPOSE OF

AT&T MAINTENANCE CREW (TYPICALLY ONE PERSON) WILL MAKE AN AVERAGE OF

REV.

COUNTY:

ESSEX

LATITUDE: LONGITUDE: 42.647652° N 71.183969° W

POLE OWNER:

NATIONAL GRID #591-84

POLE NUMBER
STRUCTURE TYPE:

UTILITY POLE

ARCHITECT/ENGINEER:

HUDSON DESIGN GROUP LLC 45 BEECHWOOD DRIVE NORTH ANDOVER, MA 01845

#### **DRIVING DIRECTIONS**

HEAD NORTHEAST TOWARD LEGGATT McCALL CONN. TURN LEFT ONTO LEGGATT McCALL CONN. CONTINUE ONTO BLURR ST. TURN LEFT ONTO COCHITUATE RD. TAKE RAMP TO I-90 E/MASSPIKE W/SPRINGFIELD/BOSTON. KEEP RIGHT AT THE FORK, FOLLOW SIGNS FOR I-90 E/INTERSTATE 95/MASSPIKE/BOSTON AND MERGE ONTO I-90 E/ MASSPIKE (SIGN FOR 90 E/I-95/BOSTON) TAKE EXIT 14 TOWARD N.H.-MAINE/I-95/MA-128/S SHORE. KEEP LEFT AT THE FORK, FOLLOW SIGNS FOR I-95 N AND MERGE ONTO I-95 N/MA-128 N. TAKE EXIT 37B TO MERGE ONTO I-93 N TOWARD CONCORD N.H. TAKE EXIT 43 TOWARD MA-133/ANDOVER/N TEWKSBURY. KEEP RIGHT AT THE FORK, FOLLOW SIGNS FOR ROUTE 133 E. AND MERGE ONTO 133 E. MERGE ONTO

#### **CALL 811**



WWW.DIGSAFE.COM

72 HOURS PRIOR UNDERGROUND SERVICE ALERT



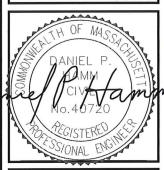


750 WEST CENTER STREET
SUITE #301
WEST BRIDGEWATER, MA 02379



45 BEECHWOOD DRIVE

EL: (978) 557-5553



CHECKED BY:

APPROVED BY:

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SUBMITTALS

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CLUSTER AND NODE NUMBER
AREA6\_28A

SITE ID: AREA6\_28A

SITE ADDRESS: 308 LOWELL STREET ANDOVER, MA 01810 ESSEX COUNTY

SHEET TITLE

TITLE SHEET

SHEET NO

T-1

#### **GENERAL NOTES**

 FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:

CONTRACTOR - CENTERLINE SUBCONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION) OWNER - AT&T MOBILITY

- PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
- 3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- 4. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
- 7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- 8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
- 9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR
- 10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- 11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- 12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
- 13. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.
- 14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR—ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
- 15. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E
- (Fy = 36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED.
- TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
- 16. CONSTRUCTION SHALL COMPLY WITH SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T SITES."
- 17. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

18. APPLICABLE BUILDING CODES:

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE: MA STATE BUILDING CODE 780 CMR 9TH EDITION & IBC 2015 ELECTRICAL CODE: 2017 NATIONAL ELECTRICAL CODE (NFPA 70-2017)

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE:

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

MANUAL OF STEEL CONSTRUCTION, ASD, FOURTEENTH EDITION:

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-H, STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

#### **GROUNDING NOTES**

- 1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE—SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH ERICSSON AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
- 3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL—OF—POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81 STANDARDS) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS
- 4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
- EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS AND #2 AWG STRANDED COPPER FOR OUTDOOR BTS.
- 6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- 7. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- B. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO GROUND BAR.
- ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- 10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- 11. METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- 12. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/2 IN. OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NFC 250.50

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550 COCHITUATE ROAD FRAMINGHAM, MA 01701



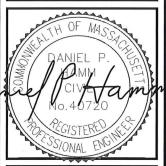
750 WEST CENTER STREET
SUITE #301
WEST BRIDGEWATER, MA 02379



45 BEECHWOOD DRIVE N. ANDOVER, MA 01845 TEL: (978) 557-5553 FAX: (978) 336-5586

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APPROVED BY:

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1	11/25/19	ISSUED FOR CONSTRUCTION	MR	
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CLUSTER AND NODE NUMBER: AREA6\_28A

SITE ID: AREA6\_28A

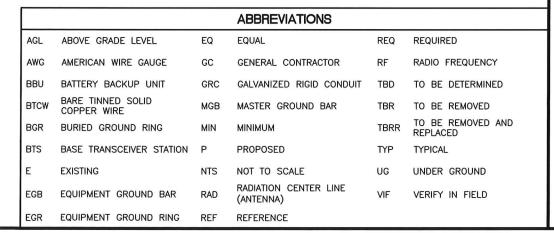
SITE ADDRESS: 308 LOWELL STREET ANDOVER, MA 01810 ESSEX COUNTY

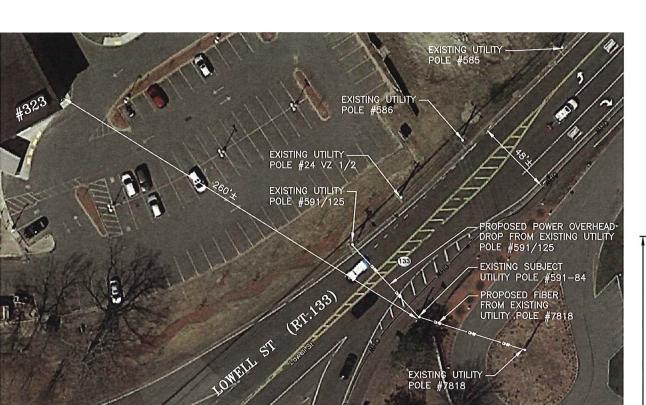
SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-1





EXISTING SECONDARY -EXISTING UTILITY POLE #591-84

**KEY PLAN** 

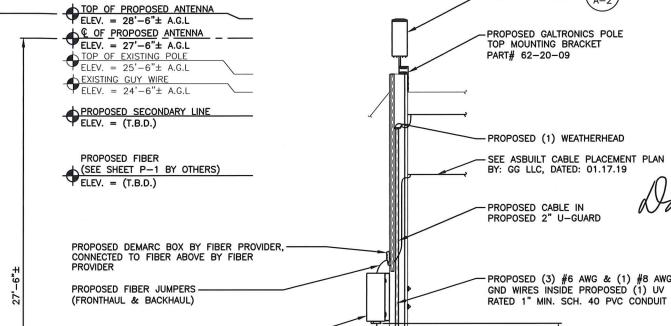
22x34 SCALE: 1"=30'

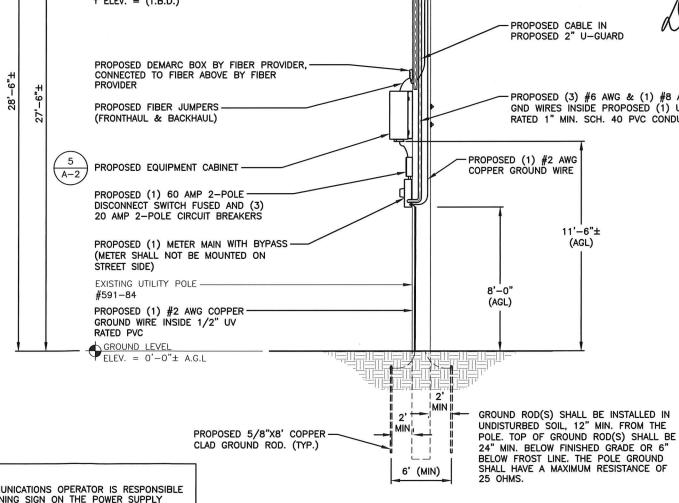
11x17 SCALE: 1"=60'

**EXISTING CONDITIONS PHOTO DETAIL** 

SCALE: N.T.S

A-1

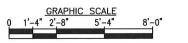




THE WIRELESS COMMUNICATIONS OPERATOR IS RESPONSIBLE FOR PLACING A WARNING SIGN ON THE POWER SUPPLY COMMUNICATING THE RF EMISSIONS IN COMPLIANCE WITH

THE CURRENT EDITION OF IEEE STANDARD C95.2. THIS SIGN MUST ALSO HAVE A 24-HOUR CONTACT PHONE NUMBER IN CASE OF EMERGENCY. THIS NUMBER MUST BE VISIBLE FROM THE GROUND.

**ELEVATION** 22x34 SCALE: 3/8"=1'-0" 11x17 SCALE: 3/16"=1'-0"





42.647652° N 71.183969° W

LONG:

-PROPOSED ANTENNA

11'-6"±

(AGL)

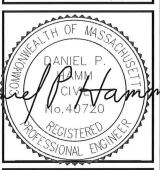
**APPROXIMATE** 



750 WEST CENTER STREET SUITE #301 WEST BRIDGEWATER, MA 02379



DPH



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> CLUSTER AND NODE NUMBER: AREA6\_28A

0 05/30/19 ISSUED FOR REVIEW

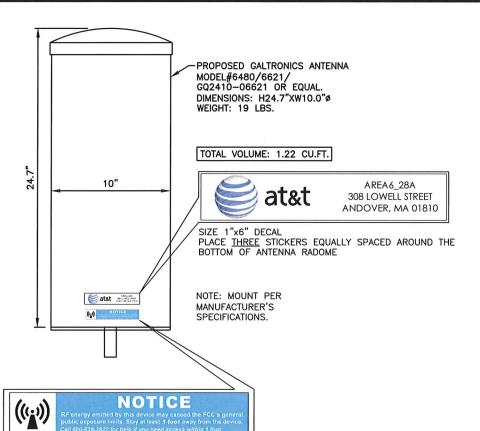
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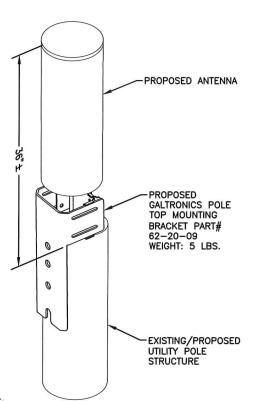
KEY PLAN AND **ELEVATION** 

**A**-1



NO1-CD-16 1"x6" NOTICE DECAL
PLACE THREE NOTICE STICKERS EQUALLY SPACED
AROUND THE BOTTOM OF ANTENNA RADOME

## ANTENNA DETAIL SCALE: N.T.S 1 A-6

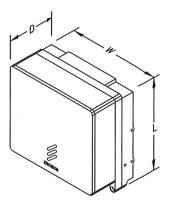


MOUNT PER MANUFACTURER'S SPECIFICATIONS.

ANTENNA MOUNT DETAIL

SCALE: N.T.S

4
A-2



MODEL	QTY	L	W	D	W	GT.
2203	2	8.0"	8.0"	4.0"	11	LB
2205	1	8.0"	8.0"	4.0"	11	LB

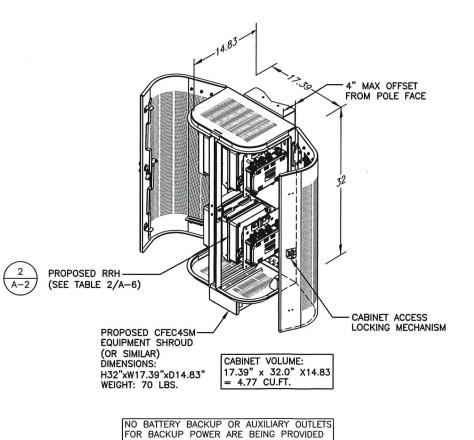
NOTE:

MOUNT PER MANUFACTURER'S SPECIFICATIONS.

RRH DETAIL

SCALE: N.T.S



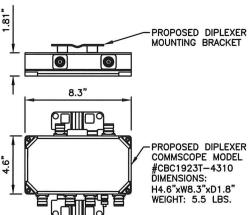


MOUNT PER MANUFACTURER'S SPECIFICATIONS.

**EQUIPMENT CABINET DETAIL** 

IN THIS DESIGN

SCALE: N.T.S



NOTE: MOUNT PER MANUFACTURER'S SPECIFICATIONS.

DIPLEXER DETAIL (AS REQUIRED)

SCALE: N.T.S

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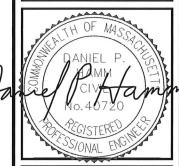


HUDSON Design Group LLC

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DATE DESCRIPTION

1 11/25/19 ISSUED FOR CONSTRUCTION MR 0 05/30/19 ISSUED FOR REVIEW MR

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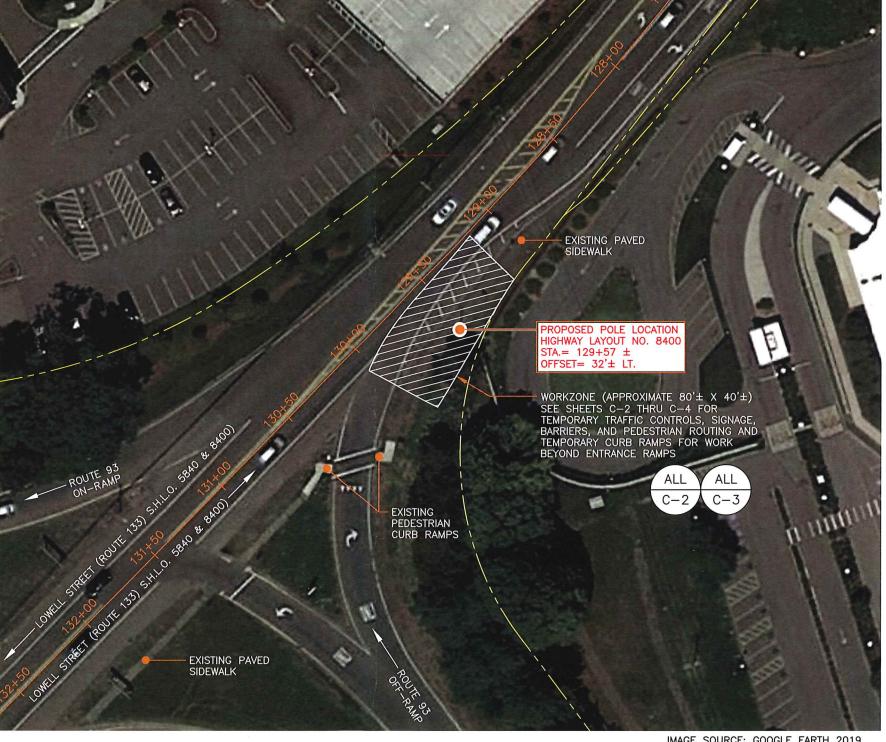
SHEET TITLE

**EQUIPMENT DETAILS** 

SHEET NUMBE

A-2





#### IMAGE SOURCE: GOOGLE EARTH 2019

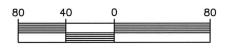
#### NOTES:

- HIGHWAY LAYOUT SHOWN IN ORANGE IS BASED ON PLANS OF STATE HIGHWAY LAYOUT NO. 8400, PLAN OF ANDOVER 2014 ALTERATION ONE SHEET, ALTERED AND LAID OUT AS A STATE HIGHWAY, DATED JULY 16, 2014, PREPARED BY BAYSIDE ENGINEERING. ADDITIONAL LAYOUT INFORMATION BASED ON PLANS OBTAINED THROUGH MASSDOT STATE HIGHWAY LAYOUT MAPS GIS DATA BASE: STATE HIGHWAY LAYOUT NO. 4554, ANDOVER - 1957 ALTERATION - SHEET 2 OF 13 SHEETS (PLAN DATE NOT PROVIDED); STATE HIGHWAY LAYOUT NO. 5840, ANDOVER - 1969 ALTERATION - SHEET 4, 5, & 6 OF 6 SHEETS (PLAN DATE NOT PROVIDED)
- 2. THE LOCATION IS APPROXIMATE BASED ON COMPILING RECORD DOCUMENTS. FIELD SURVEY OF HIGHWAY MONUMENTS HAS NOT BEEN PERFORMED BY PROTERRA DESIGN GROUP, LLC. LOCATION OF OBJECTS AND ALIGNMENTS SHOWN HEREON MAY BE REVISED AS ADDITIONAL OR MORE ACCURATE INFORMATION MAY BECOME AVAILABLE.
- 3. PROPOSED UTILITY POLE LOCATION IS BASED ON PLAN OF AT&T SITE ID: AREA6\_28A, 308 LOWELL STREET, ANDOVER, MA 01810, PREPARED BY HUDSON DESIGN GROUP LLC, DATED 05/30/2019.
- 4. HIGHWAY ACCESS PERMIT WITH MA DOT MAY BE REQUIRED, CONTRACTOR TO CONFIRM PRIOR TO CONSTRUCTION.
- 5. 40 MPH POSTED SPEED ZONE APPROXIMATELY 50 FEET NORTHEAST OF PROJECT SITE.



### MassDOT HIGHWAY LAYOUT PLAN

11x17 SCALE: 1"=80' 22x34 SCALE: 1"=40'



APPROXIMATE LAT: 42.647652° N POLE COORDINATES: LON: 71.183969' W

(COORDINATES PROVIDED FROM CONSTRUCTION DRAWINGS PREPARED BY OTHERS. SEE NOTE 3) ERMITTING



550 COCHITUATE ROAD FRAMINGHAM, MA 01701



750 WEST CENTER STREET, SUITE 301 WEST BRIDGEWATER, MA 02379



4 Bay Road, Building A Suite 200 Hadley, MA 01035 Ph:(413)320-4918

JMM/TEJ CHECKED BY:

APPROVED BY: JMM/TEJ

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CLUSTER AND NODE NUMBER AREA6\_28A

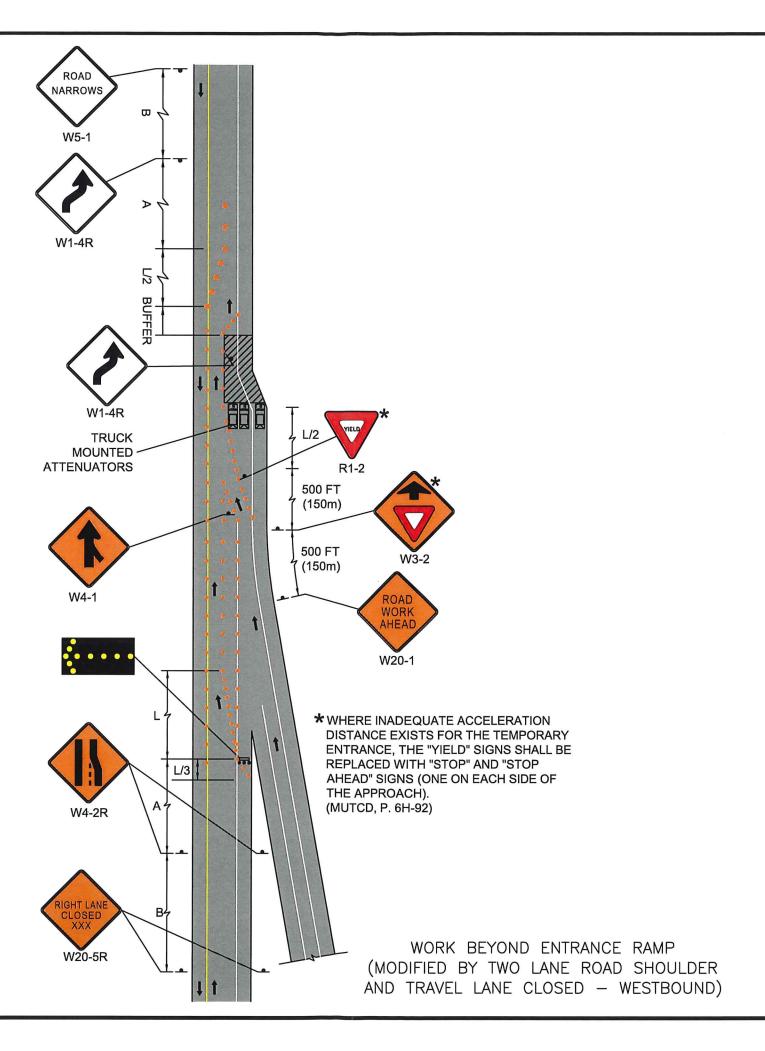
AREA6\_28A

SITE ADDRESS: 308 LOWELL STREET ANDOVER, MA 01810 ESSEX COUNTY

SHEET TITLE

HIGHWAY LAYOUT PLAN

SHEET NUMBER







750 WEST CENTER STREET, SUITE 301 WEST BRIDGEWATER, MA 02379



4 Bay Road, Building A Suite 200 Hadley, MA 01035 Ph:(413)320-4918

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APPROVED BY:	.IMM /TF.

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CLUSTER AND NODE NUMBER: AREA6\_28A

SITE ID: AREA6\_28A

SITE ADDRESS: 308 LOWELL STREET ANDOVER, MA 01810 ESSEX COUNTY

SHEET TITLE

TEMPORARY TRAFFIC CONTROLS

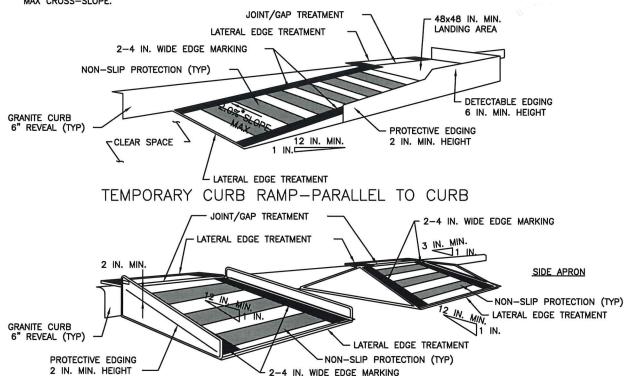
SHEET NUMBE

C-2

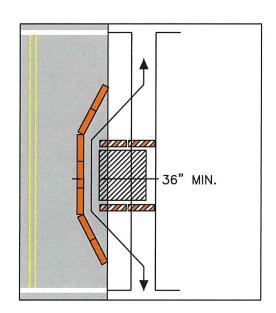
- PROTECTIVE EDGING WITH A 2 IN. MINIMUM HEIGHT SHALL BE INSTALLED WHEN THE CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6 IN. OR GREATER OR HAS A SIDE APRON SLOP STEEPER THAN 1:3 (3%), PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN THE CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3 IN OR MORE.
- 3. DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION
- 4. CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.

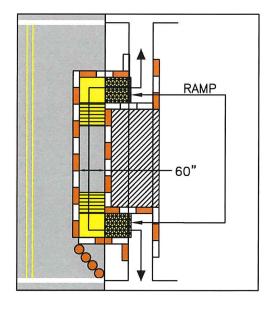
- CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A CONTRASTING COLOR 2 TO 4 IN. WIDE MARKING. THE MARKING IS OPTIONAL WHERE COLOR CONTRASTING EDGING
- WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.

  8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE
- LESS THAN 0.5 IN. WIDTH.
- CHANGES BETWEEN SURFACE HEIGHTS SHOULD NOT EXCEED 0.5 IN. LATERAL EDGES SHOULD BE VERTICAL UP TO 0.25 IN. HIGH, AND BEVELED AT 1:2 BETWEEN 0.25 IN. AND 0.5

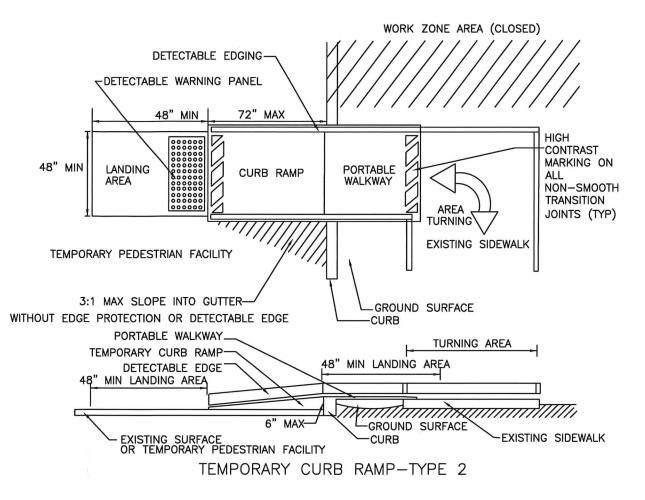


PROTECTIVE EDGE TEMPORARY CURB RAMP-PERPENDICULAR TO CURB PEDESTRIAN DETAILS





**PEDESTRIAN DETAILS** 



#### PEDESTRIAN **DETAILS**

- When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, temporary facilities shall be provided and they shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility.
- A pedestrian channelizing device that is detectable by a person with a visual disability traveling with the aid of a long cane shall be placed across the full width of the closed sidewalk.
- · When used, temporary ramps shall comply with Americans with Disabilities Act (see Figures Ped-1 & Ped-2).
- The alternate pathway should have a smooth continuous hard surface for the entire length of the temporary pedestrian facility.
- The protective requirements of a TTC situation have priority in determining the need for temporary traffic barriers and their use in this situation should be based on engineering judgment.
- Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.

#### **AUDIBLE DEVICES**

For long term sidewalk closures (at a minimum overnight) a form of speech messaging for pedestrians with visual disabilities shall be provided. Audible information devices such as detectable barriers or barricades and other passive pedestrian activation (motion activated) devices should be considered for these cases. These audible devices can be mountable or stand alone.

PERMITTING



550 COCHITUATE ROAD FRAMINGHAM, MA 01701



750 WEST CENTER STREET, SUITE 301 WEST BRIDGEWATER, MA 02379



4 Bay Road, Building A Suite 200 Hadley, MA 01035 Ph: (413)320-4918

JMM/TEJ CHECKED BY:

APPROVED BY: JMM/TEJ

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CLUSTER AND NODE NUMBER: AREA6 28A

> SITE ID: AREA6 28A

SITE ADDRESS 308 LOWELL STREET ANDOVER, MA 01810 ESSEX COUNTY

SHEET TITLE

TEMPORARY TRAFFIC CONTROLS

SHEET NUMBER

#### **NOTES:**

- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, UNLESS SUPERCEDED BY THESE PLANS.
- 2. ALL SIGN LEGENDS, BORDERS, AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
- TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
- 4. TEMPORARY CONSTRUCTION SIGNING, BARRICADES, AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES" AND/OR "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
- 6. CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
- 7. THE FIRST TEN PLASTIC DRUMS OF A TAPER SHALL BE MOUNTED WITH TYPE A LIGHTS.
- 8. THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
- 9. DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
- 10. MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
- 11. MINIMUM LANE WIDTH IS TO BE 11 FEET (3.3m) UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
- 12. ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.

#### LEGEND:

ARROW BOARD

CHANGEABLE MESSAGE SIGN

REFLECTORIZED PLASTIC DRUM
OR 36" CONE

P/F POLICE/FLAGGER DETAIL

TYPE III BARRICADE

WORK ZONE

DIRECTION OF TRAFFIC

IMPACT ATTENUATOR

MEDIAN BARRIER

WORK ZONE

DIRECTION OF TRAFFIC

IMPACT ATTENUATOR

TRAFFIC OR PEDESTRIAN SIGNAL

MEDIAN BARRIER

WORK VEHICLE

TRUCK MOUNTED ATTENUATOR

TRAFFIC OR PEDESTRIAN SIGNAL

#### SUGGESTED WORK ZONE WARNING SIGN SPACING

WARNING LIGHTS

MEDIAN BARRIER WITH

ROAD TYPE	DISTANCE BETWEEN SIGNS **				
ROAD TIFE	Α	В	С		
LOCAL OR LOW VOLUME ROADWAYS*	350 (100)	350 (100)	350 (100)		
MOST OTHER ROADWAYS*	500 (150)	500 (150)	500 (150)		
FREEWAYS AND EXPRESSWAYS*	1,000 (300)	1,500 (450)	2,640 (800)		

\* ROAD TYPE TO BE DETERMINED BY MASSDOT OFFICE OF TRANSPORTATION PLANNING.

\*\* DISTANCES ARE SHOWN IN FEET (METERS). THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCP SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20-1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (i.e. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY-TO-DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

R2-10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

R2-10a, R2-10e, AND W20-1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

Based on: Table 6C-1 MUTCD LATEST EDITION

#### STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED

-		
	SPEED*	DISTANCE
	(km/h)	(m)
	30	35
	40	50
	50	65
	60	85
	70	105
	80	130
	90	160
	100	185
	110	220
	120	250

SPEED*	DISTANCE
(mph)	(ft)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

\*POSTED SPEED, OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED

THESE VALUES MAY BE USED TO DETERMINE THE LENGTH OF LONGITUDINAL BUFFER SPACES.

THE DISTANCES IN THE ABOVE CHART REPRESENT THE MINIMAL VALUES FOR RUFFER SPACING.

Source: Table 6C-2 MUTCD LATEST EDITION

CONVENTIONAL ROADWAY- A STREET OR HIGHWAY OTHER THAN A LOW-VOLUME ROAD, EXPRESSWAY, OR FREEWAY.

EXPRESSWAY - A DIVIDED HIGHWAY WITH PARTIAL CONTROL OF ACCESS.

FREEWAY- A DIVIDED HIGHWAY WITH FULL CONTROL OF ACCESS.

<u>LOW-VOLUME ROAD</u>- A FACILITY LYING OUTSIDE OF BUILT-UP AREAS OF CITIES, TOWNS, AND COMMUNITIES, AND IT SHALL HAVE A TRAFFIC VOLUME OF LESS THAN 400 AADT. IT SHALL NOT BE A FREEWAY, EXPRESSWAY, INTERCHANGE RAMP, FREEWAY SERVICE ROAD OR A ROAD ON A DESIGNATED STATE HIGHWAY SYSTEM.

Source: MUTCD LATEST EDITION

#### TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH (L)*	
MERGING TAPER	AT LEAST L	
SHIFTING TAPER	AT LEAST 0.5L	
SHOULDER TAPER	AT LEAST 0.33L	
ONE-LANE, TWO-WAY TRAFFIC TAPER	50 FT MIN.(15 m) 100 FT(30 m) MAX.	
DOWNSTREAM TAPER	50 FT MIN.(15 m) 100 FT MAX.(30 m) PER LANE	

Source: Table 6C-3 MUTCD LATEST EDITION

#### FORMULAS FOR DETERMINING TAPER LENGTHS

SPEED LIMIT (S)	TAPER LENGTH (L) FEET
40 MPH OR LESS	L= \frac{WS^2}{60}
45 MPH OR MORE	L= WS

SPEED LIMIT (S)	TAPER LENGTH (L) Meters
60 KM/H OR LESS	$L = \frac{WS^2}{155}$
70 KM/H OR MORE	L= WS 1.6

WHERE: L = TAPER LENGTH IN FEET (METERS)

- W = WIDTH OF OFFSET IN FEET (METERS)
- S = POSTED SPEED LIMIT, OR OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICAPATED OPERATING SPEED IN MPH (KM/H)

Source: Table 6C-4 MUTCD LATEST EDITION

# ERMITTING



550 COCHITUATE ROAD FRAMINGHAM, MA 01701



750 WEST CENTER STREET, SUITE 301 WEST BRIDGEWATER, MA 02379



4 Bay Road, Building A Suite 200 Hadley, MA 01035 Ph: (413)320-4918

CHECKED BY:

JMM/TEJ

APPROVED BY: JMM/TEJ

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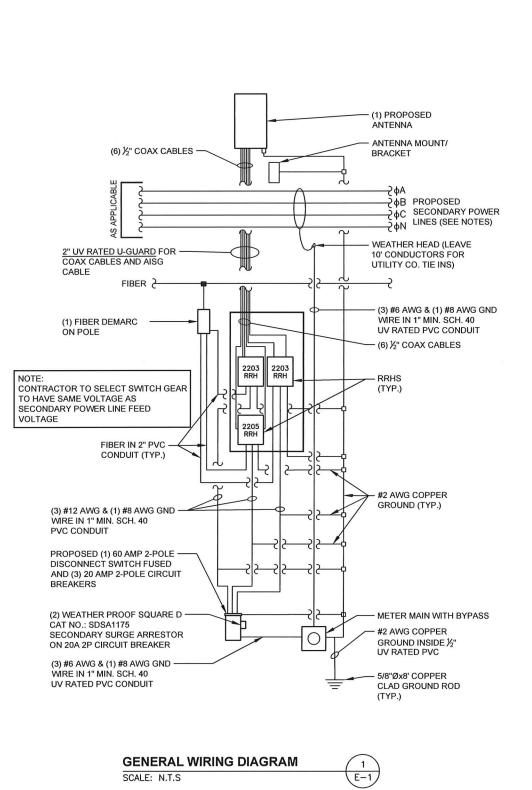
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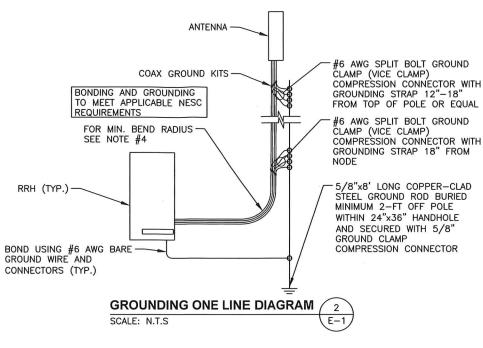
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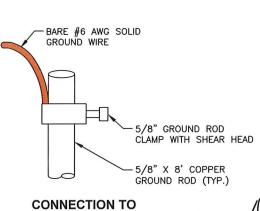
TEMPORARY TRAFFIC CONTROLS

SHEET NUMBER

C-4







**GROUND ROD** 

SCALE: N.T.S



USE MILBAND MODEL NO .: U2272-RL-5T9-BL OR APPROVED EQUAL

WATERPROOFING KIT (SEE NOTE 3) CABLE GROUND KIT #6 AWG STRANDED COPPER-GROUND WIRE (GROUNDED TO GROUND BAR OR COMPRESSION CONNECTION) (SEE NOTES 1 & 2)

12"-24"

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR, OR COMPRESSION CONNECTION.

GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.

1/2" CABLE -

NOTES:

3. WEATHERPROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

4. MINIMUM BEND RADIUS OF A CONDUCTOR SHALL NOT BE BENT TO LESS THAN 12 TIMES OVERALL CONDUCTOR DIAMETER.



METER MAIN WITH BYPASS DETAIL 5

SCALE: N.T.S



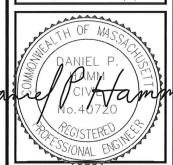


750 WEST CENTER STREET SUITE #301 WEST BRIDGEWATER, MA 02379



TEL: (978) 557-5553 FAX: (978) 336-5586

DPH



CHECKED BY:

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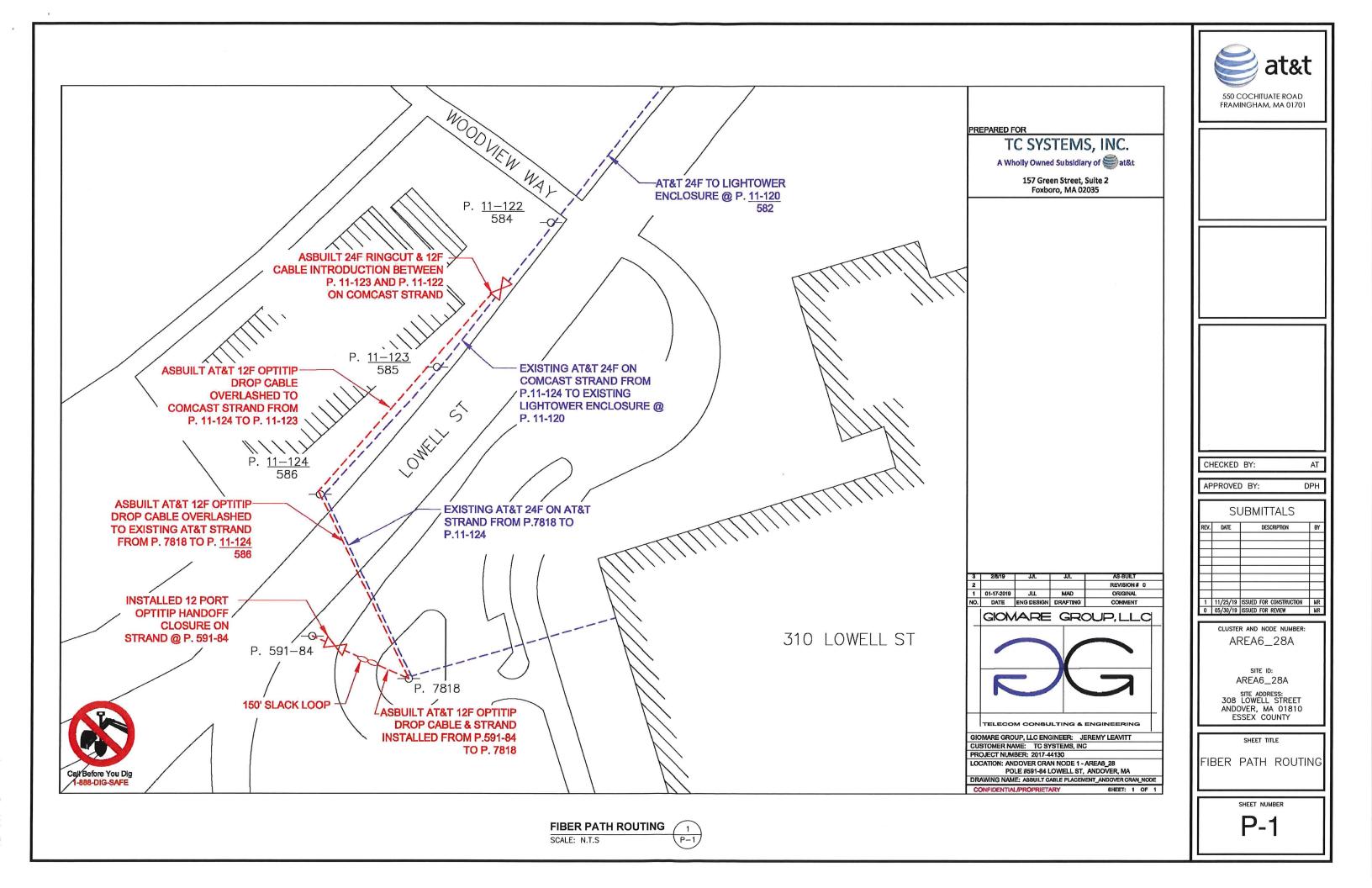
> SITE ID: AREA6\_28A

SITE ADDRESS: 308 LOWELL STREET ANDOVER, MA 01810 ESSEX COUNTY

SHEET TITLE

ELECTRICAL & GROUNDING DETAILS

SHEET NUMBER



#### Vehicle for Hire License

#### Request / Agenda:

The Board to consider voting to approve the Vehicle for Hire License for Liberty Taxi, Inc.

Pascual Colon of Liberty Taxi, Inc., 10 Main Street, Andover is requesting permission to operate a Vehicle for Hire business at 10 Main Street, Andover with 5 vehicles. The license has been reviewed and approved by the Police Department and would be effective from the date of approval through April 30, 2020.

#### Motion for Selectmen / License Conditions:

I move that the 5 Vehicle for Hire licenses for Liberty Taxi, Inc., 10 Main Street, Andover be approved as presented on the conditions that no livery vehicles to be stored in Andover and that all other requirements of the Town are met prior to issuance.

Moved by:	
Seconded by:	
Vote:	Yes
	No Abstain

#### Vehicle for Hire License

#### Request / Agenda:

The Board to consider voting to approve the Vehicle for Hire License for Lale's Livery, Inc.

Lale Wharton of Lale's Livery, Inc. d/b/a VIP Livery, 460 River Road, Apt. 212, Andover is requesting permission to operate a Vehicle for Hire business at 460 River Road, Apt. 212, Andover with 1 vehicle. The license has been reviewed and approved by all applicable departments and would be effective from the date of approval through April 30, 2020.

#### Motion for Selectmen / License Conditions:

I move that 1 Vehicle for Hire license for Lale's Livery, Inc., 460 River Road, Apt. 212, Andover be approved as presented on the conditions that:

- 1. No customers or clients may be on site at any time.
- 2. Only the one vehicle, owned by Ms. Wharton, is allowed on site.
- 3. No signage or advertising is allowed on site.
- 4. All other local, state and federal approvals and permits must be obtained prior to the operation of the business.
- 5. If any changes are made to the business (including number of employees, vehicles, name, nature of business operation), they must be reviewed by the Zoning Enforcement Office for compliance with the Andover Zoning Bylaw.
- 6. All other requirements of the Town are met prior to issuance.

Moved by:	
Seconded by:	
Vote:	Yes
	No Abstain

#### Board of Selectmen Meeting Monday, December 16, 2019

#### I. Call to Order

Chairperson Laura Gregory called the meeting of the Select Board to order at 7:00 P.M. in the 3<sup>rd</sup> Floor Conference Room located at Town Offices. Present from the Select Board: Alex Vispoli, Dan Koh, Annie Gilbert, Chris Huntress, and Laura Gregory.

Others in Attendance: Town Manager Andrew Flanagan, Deputy Town Manager Michael Lindstrom, Town Counsel Tom Urbelis, Town Clerk Austin Simko. The meeting was duly posted and cablecast live.

#### II. Opening Ceremonies

A. Moment of Silence/Pledge of Allegiance

The meeting started with a Moment of Silence followed by a Salute to the Flag.

#### III. <u>Communications/Announcements/Liaison Reports</u>

The Town Manager extended his thanks to everyone who came out on Friday to help make Holiday Happenings a success.

Annie Gilbert said the Veterans Holiday Breakfast she attended on Wednesday at the Old Town Hall was well attended. She complimented Veterans Director, Marc Comeiro on his efforts to reach out to local veterans who have not participated befere.

Dan Koh, also extended a thank you to everyone for thier efforts in making Holiday Happenings so successful. Alex Vispoli thanked the staff that manned the Saturday morning coffee at Old Town Hall, which had a holiday vibe.

Although the weather could have been better for Holiday Happenings, Laura Gregory said everything went well. Laura also attended the Wreaths Across America Event with Veterans Director Marc Comeiro. This is the first time Andover has chosen to participate in this event.

#### IV. <u>Citizens Petitions and Presentations</u>

None

#### V. Public Hearings

#### A. Fiscal Year 2020 Tax Classification 2<sup>nd</sup> Reading

Board to discuss and vote on classification and taxation of all property within the Town. David Billard, Tax Assessor provided a brief version of the various shifts and their impact on tax rates for residential, commercial and industrial property.

The Board is required vote on the following four items:

- 1. Residential Factor: If Town going to use a classified or one unit rate.
- 2. Open Space Discount: At the DOR's request, the open space parcels were reviewed and for FY2020 reclassified as vacant land. No communities in 2019 have adopted this.
- 3. Vote of Residential Exemption: ability to grant an exemption of up to 35% of the average assessed value of all residential property which is applied to the assessment of the principal residence of the property owner.
- 4. Vote of Commercial Exemption: allows for an exemption up to a 10% for commercial property owners that had an average annual employment of 10 or fewer employees and an assessed value less than 1,000,000. In 2019 only 15 communities adopted this exemption.

Every year, Mr. Ballard looks at where the values went in the town, up or down. This past year the aggregate value increased by 5.7% and to look at the residential factor, taking the new factor and our levy amount divided by the value, is a rate of \$17.23.

The Board discussed values they would be interested in supporting with a uniform increase, leaning toward a 157.5 shift. Chris Huntress disagrees and favors the 158.0 shift.

Alex Vispoli moved to adopt a residential facor of 157.5 for FY-2020. The motion was seconded by Annie Gilbert and voted 5-0 to approve.

Alex Vispoli moved that the Board not adopt an open space discount for FY-2020. The motion was seconded by Annie Gilbert and voted 5-0 to approve.

Alex Vispoli moved the Board not adopt a residential exemption for fiscal year FY-2020. The motion was seconded by Annie Gilbert and voted 5-0 to approve.

Alex Vispoli moved not to adopt a Commercial Exemption for FY-2020. The motion was seconded by Annie Gilbert and voted 5-0 to approve.

#### VI. Regular Business of the Board

#### A. Community Choice Aggregation

Deputy Town Manager and Patrick Roche from Good Energy gave an overview of Community Choice Aggregation (CCA)noting that energy and sustainability is one of the Board's goals and CCA is the perfect way to start. This is a state regulated program to purchase renewable energy at competitive prices. Andover would be able to make bulk purchases of energy with a higher renewable content than required by the MA Renewable Portfolio Standards. The Program gives consumers greater control over the price and content of their electricy supply by offering one or more alternatives to National Grid

Basic Services. Residents can opt out at any time with no penalties. Residents still get one bill, and still be able to contact National Grid. Change would provide rate stability, local renewable increasing our renewable portfolio, and potential savings. Mike Lindstrom reviewed the timeline beginning with a stakeholder subcommittee and ending with a vote at Town Meeitng.

Implementation steps: Should the warrant article pass at Town Meeting, a design team would be convened, followed by the approval of the Board that would be filed with the Dept of Energy Resources until the DPU issues an order approving the aggregation plan. An RFP would be assembled and put out to bid with information and education sessions provided to the public. Laura Gregory has attended many of the meetings and agrees with Dan Koh that we should begin to implement this program. The public had the opportunity for questions.

#### B. Bertucci's Restaurants, LLC Liquor License Change in Manager

Alex Vispoli moved to approve the application of Bertucci's Restaurants, LLC d/b/a Bertucci's, 90 Main Street Andover; for a change of manager to its Wine and Malt Alcoholic Beverate License to be Jason Fuller of 384 Concord Street, Manchester, New Hampshire, subject to the condition that all other requirements of the Town are met prior to the issuance of the license and that all employees who serve alcohol be TIP certified within thirty (30) days. The motion was seconded by Annie Gilbert and voted 5-0 to approve.

#### C. Andover Restaurant Group, LLC Liquor License Change in Hours

Annie Gilbert moved to approve the request from Andover Restaurant Group, LLC d/b/a LaFina, 27 Main Street, for a change in hours to its All Alcohol Restaurant Alcoholic Beverage License to allow pouring on Sundays starting at 10:00 A.M. subject to the condition that all other conditions of the town are met. The motion was seconded by Alex Vispoli and voted 5-0 to approve.

#### D. JackRuss, LLC Liquor License Change in Officers / Directors

Dan Koh moved for the Board to approve a request from JackRuss, LLC d/b/a Andiamo Restaurant & Bar, 1 Minuteman Road, for a change in Officers / Directors relating to its All Alcohol Restaurant All Alcoholic Beverage License. The motion was seconded by Alex Vispoli and voted 5-0 to approve.

#### E. Affordable Property Right of First Refusal

Board to discuss and consider voting on the Town's Right of First Refusal for two affordable units located at 172 Haverhill Street and 174 Haverhill Street. Town Counsel explained the process.

Denise Johnson from Andover Community Trust (ACT) has been working with Lisa Schwartz of the Planning Dept to find a buyer for the affordable home on Haverhill Street

and ACT is in the position to step in and purchase the units, and turn around and sell the units as long as they have active participation with the Planning Department. ACT also provided a good fall-back position because they could buy it.

The Board took no action – hold for January Board Meeting.

## F. <u>Amendments to the Traffic Rules and Regulations –2<sup>nd</sup> Reading</u> Laura Gregory thanked Chris Huntress for his work in investigating this request comparing it to the Outdoor Dining Licenses. Town Urbelis said the insurance certificate submitted did not have all the required information.

Schedule 1, Article V, Section 2 – Parking

1. Restrict three (3) parking spaces (60 ft. total) in front of 27 Main Street for the purposes of valet parking with the restriction limited to Thursday – Saturday 5 pm – 11pm.

Alex Vispoli moved to approve the Valet Parking License request pending legal review including insurance compliance. Motion seconded by Annie Gilbert and voted 5-0 to approve.

#### VII. Consent Agenda

#### A. Appointments by the Town Manager

Alex Vispoli moved that the Board vote to approve the following appointments by the Town Manager as printed. The motion was seconded by Dan Koh and voted 5-0 to approve.

Department	Name	Position	Rate/Term	Date of Hire
Ballardvale Historic	Sara Sobieski	Member	Term Expires	12/16/2019
District Commission	Nigrelli		6/30/2022	
	(R. Branca)			
Towle Fund	Sandra Levine	Member	Term Expires	12/16/2019
	(M. Strout)		6/30/2021	
Community Development	Anthony Collins	Planning	\$59,060/year	1/2/2020
& Planning – Planning	(K. Forina)	Assistant		
Division				
Greater River Valley	John Lamond	Coordinator	\$31.39/hour	12/17/2019
Medical Reserve Corps				
Department of Public	Rose Fragala	Intern	\$12.75/hour	12/17/2019
Works				
Memorial Hall Library	Violet Rabold	Teen Room Aide	\$12.00/hour	12/30/2019
	(C. Murphy)			
Community Services –	Justin Gu	Seasonal	\$12.00/hour	11/25/2019
Youth Services				

Community Services –	Lindsey Parziale	Seasonal	\$12.00/hour	12/5/2019
Youth Services				
Community Services –	Michael Ruggere	Seasonal	\$12.00/hour	12/17/2019
Recreation				
Community Services –	Joshua Salowe	Seasonal	\$12.00/hour	12/03/2019
Recreation				
Community Services –	Jasmin Pereyra	Kid Care	\$16.00/hour	12/17/2019
Recreation				
Community Services –	James Ventre	Kid Care	\$11.25/hour	12/17/2019
Recreation				

The Director of the Medical Reserve Corp distributed a medical supply kit for flu season. The Medical Reserve Corp was assembled after 9/11 originally falling under HHS and they are now under the Assistant Secretary for Emergency Response.

#### VIII. Approval of Minutes

Annie Gilbert moved to approve the Minutes of January 28, 2019 (rev), February 25, 2019, and March 25, 2019. The motion was seconded by Chris Huntress and voted 4-0-1 to approve. Dan Koh abstained.

Annie Gilbert moved to approve the Select Boad Minutes of May 13, 2019, July 15, 2019, November 18, 2019 and December 2, 2019. The motion was seconded by Dan Koh and voted 5-0 to approve.

#### IX. Executive Session

Alex Vispoli moved the Board go into Executive Session pursuant to Purpose 2 of Massachusetts General Laws, Chapter 30, Section 21(a), to conduct strategy sessions in preparation for negotiations with nonunion personnel, i.e., the Town Manager., and not to return to open session. The motion was seconded by Dan Koh. Roll call: A. Gilbert-Y, D. Koh-Y, A. Vispoli-Y, C. Huntress-Y, L. Gregory-Y.

#### X. Adjourn

At 8:31 PM the Board moved from Open Session to Executive Session not to return.

Respectfully submitted,

Dee DeLorenzo Recording Secretary

Documents: Tax Classification Presentation

Community Choice Presentation